Published: June 2012

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*Indicates National and/or State required elements

Indiana Inclusion/Exclusion Criteria

Definition:

To ensure consistent data collection across the State and with the National Trauma Data Standard, a trauma patient is defined as a patient sustaining a traumatic injury and meeting the following criteria:

At least one of the following injury diagnostic codes defined in the International Classification of Diseases, Ninth Revision, Clinical Modification **(ICD-9-CM):**

800–959.9

And including **one or more** of the following:

- hospital admission as defined by your trauma registry inclusion criteria **and/or:**
- pt transfers via EMS/law enforcement (including Air Ambulance) from one hospital to another (even if later discharged from the ED) **and/or:**
- death resulting from the traumatic injury (independent of hospital admission or transfer status)

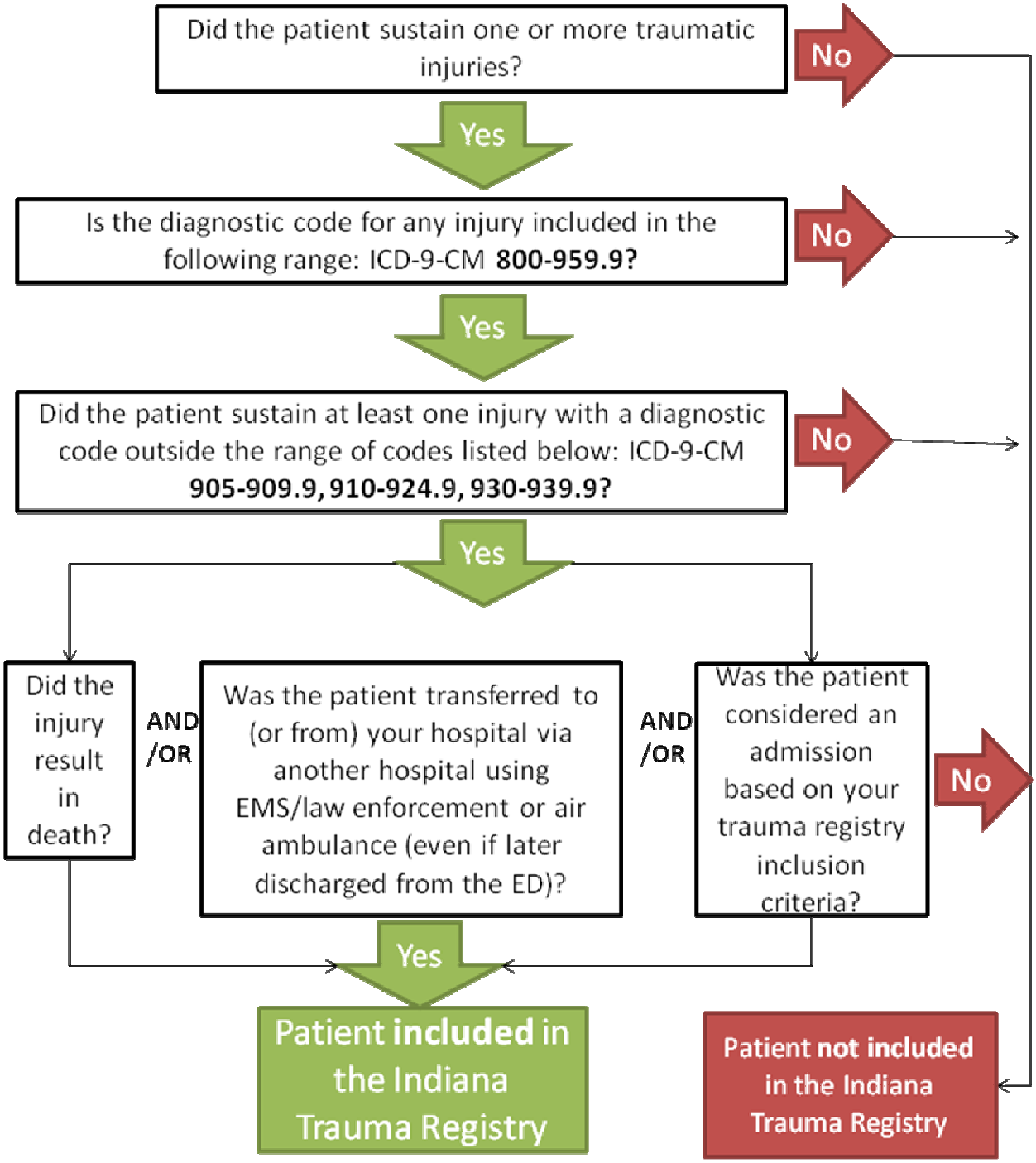
Excluding: ICD-9-CM 905-909.9 (late effects of injury)

ICD-9-CM 910-924.9 (superficial injuries: blisters, contusions, abrasions,

Insect bites)

ICD-9-CM 930-939.9 (foreign bodies – ingested, eye, etc.)

Indiana Trauma Registry Inclusion Criteria Map



National Element

COMMON NULL VALUES

Data Format [combo] single-choice

Definition

These values are to be used with each of the National Trauma Data Standard Data Elements and Indiana Trauma Data Standard Data Elements in this document which have been defined to accept the Null Values.

Field Values

- Not Applicable
- Not Known / Not Recorded

Additional Information

- For any collection of data to be of value and reliably represent what was intended, a strong commitment must be made to ensure the correct documentation of incomplete data. When data elements associated with the National Trauma Data Standard and Indiana Trauma Data Standard are to be electronically stored in a database or moved from one database to another using XML, the indicated null values should be applied
- Not Applicable: This null value code applies if, at the time of patient care documentation, the information requested was "Not Applicable" to the patient, the hospitalization, or the patient care event. For example, variables documenting EMS care would be "Not Applicable" if a patient self-transports to the hospital.
- Not Known / Not Recorded: This null value applies if, at the time of patient care documentation, information was "Not Known" (to the patient, family, or health care provider) or no value for the element recorded for the patient. This documents that there was an attempt to obtain information but it was unknown by all parties or the information was missing at the time of documentation. For example, injury date and time may be documented in the hospital patient care report as "Unknown". Another example, Not Known/Not Recorded should also be coded when documentation was expected, but none was provided (i.e., no EMS run sheet in the hospital record for patient transported by EMS).

Demographic Information

State Element

TR 1.2

MEDICAL RECORD # *

Data Format [text]

Definition

The unique incident number associated with the local trauma registry which can be used for linkage at a later date.

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*RegistryID*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes
Required in XSD	Yes	**Min. Constraint:**	**Max. Constraint:**

Field Values

- Relevant value for data element

Data Source

- Auto-generated or electronically through linkage with the hospital trauma registry record

National Element

TR 5.1

INJURY INCIDENT DATE *

Data Format [date]

Definition

The date the injury occurred

XSD Data Type *xs: date*		**XSD Element / Domain (Simple Type)** *IncidentDate*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1,990	**Max. Constraint:** 2,030

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Estimates of date of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call times) should not be used
- If date of injury is "Not recorded / Not known", the null value is unknown

Data Source

- EMS Run Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_01 from the 2012 National Trauma Data Standard

National Element

TR 5.18

INJURY INCIDENT TIME *

Data Format [time]

Definition

The time the injury occurred

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*IncidentTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Estimates of time of injury should be based upon report by patient, witness, family, or health care provider. Other proxy measures (e.g., 911 call times) should not be used
- If time of injury is "Not recorded / Not known", the null value is unknown

Data Source

- EMS Run Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_02 from the 2012 National Trauma Data Standard

PATIENT'S LAST NAME

Data Format [text]

Definition

The patient's last name

XSD Data Type	*xs: text*	**XSD Element / Domain (Simple Type)**	*LastName*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Face Sheet
- EMS Run Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

PATIENT'S FIRST NAME

Data Format [text]

Definition

The patient's first name

XSD Data Type	*xs: text*	**XSD Element / Domain (Simple Type)**	*FirstName*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Face Sheet
- EMS Run Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

PATIENT'S MIDDLE INITIAL

Data Format [text]

Definition

The patient's middle initial

XSD Data Type	*xs: text*	**XSD Element / Domain (Simple Type)**	*MiddleInitial*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Face Sheet
- EMS Run Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

PATIENT'S SOCIAL SECURITY

Data Format [number]

Definition

The patient's social security number

XSD Data Type	*xs: number*	**XSD Element / Domain (Simple Type)**	*SocialSecurityNumber*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as ###-##-####

Data Source

- Face Sheet
- EMS Run Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

DATE OF BIRTH *

Data Format [date]

Definition

The patient's date of birth

XSD Data Type	*xs: date*	**XSD Element / Domain (Simple Type)**	*DateOfBirth*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1,890	**Max. Constraint:** 2,030

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- If less than 24 hours, complete variables: Age and Age Units
- If "Not Recorded / Not Known" complete variables: Age and Age Units
- Used to calculate patient age in days, months, or years

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_07 from the 2012 National Trauma Data Standard

AGE *

Data Format [number]

Definition

The patient's age at the time of injury (best approximation)

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *Age*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 120

Field Values

- Relevant value for data element

Additional Information

- Auto-calculated to patient's age in years when "Date of Birth" is entered
- Used to calculate patient age in hours, days, months, or years
- Only completed when date of birth is less than 24 hours, "Not Recorded / Not Known"
- Must also complete variable: Age Units

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_08 from the 2012 National Trauma Data Standard

National Element

TR 1.14

AGE UNITS *

Data Format [combo] single-choice

Definition

The units used to document the patient's age (Years, Months, Days, Hours)

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AgeUnits*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1	Hours	3	Months
2	Days	4	Years

Additional Information

- Used to calculate patient age in hours, days, months, or years
- Only completed when date of birth is less than 24 hours, "Not Recorded/Not Known"
- Must also complete variable: Age

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_09 from the 2012 National Trauma Data Standard

National Element

TR 1.16

RACE *

Data Format [combo] single-choice

Definition

The patient's race

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*Race*
Multiple Entry Configuration	Yes, max 2	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Asian
2 Native Hawaiian or Other Pacific Islander
3 Other Race
4 American Indian
5 Black or African American
6 White

Additional Information

- Patient race should be based upon self-report or identified by a family member

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_10 from the 2012 National Trauma Data Standard

OTHER RACE

Data Format [text]

Definition

The patient's secondary race (if the first race field is insufficient)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

Patient race should be based upon self-report or identified by a family
- member
- Only completed if Race is "Other Race"

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

TR 1.17

ETHNICITY *

Data Format [combo] single-choice

Definition

The patient's ethnicity

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*Ethnicity*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Hispanic or Latino 2 Not Hispanic or Latino

Additional Information

- Patient ethnicity should be based upon self-report or identified by a family member

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_11 from the 2012 National Trauma Data Standard

National Element

TR 1.15

SEX *

Data Format [combo] single-choice

Definition

The patient's sex

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*Sex*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Male 2 Female

Additional Information

- Patients who have undergone a surgical and/or hormonal sex reassignment should be coded using the current assignment

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

Uses

- Allows data to be sorted based upon sex

National Element

- National Element D_12 from the 2012 National Trauma Data Standard

TR 1.18

PATIENT'S HOME ADDRESS

Data Format [text]

Definition

The home street address of the patient's primary residence

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Face Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

TR 1.19

PATIENT'S HOME COUNTRY
*

Data Format [combo] single-choice

Definition
The country where the patient resides

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*HomeCountry*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values
- Relevant value for data element

Additional Information
- When completed with ZIP code, city, county, and state auto-calculate

Data Source
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element
- National Element D_02 from the 2012 National Trauma Data Standard

National Element

TR 1.20

PATIENT'S HOME ZIP CODE*

Data Format [text]

Definition

The patient's ZIP code of primary residence

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*HomeZip*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Stored as a 5 digit code
- May require adherence to HIPAA regulations
- When completed with Country the city, county, and state auto-calculate
- If ZIP code is "Not Applicable", complete variable: Alternate Home Residence
- If ZIP code is "Not Recorded / Not Known", complete variables: Patient's Home State ; Patient's Home County; Patient's Home City

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_01 from the 2012 National Trauma Data Standard

National Element

TR 1.21

PATIENT'S HOME CITY *

Data Format [combo] single-choice

Definition

The patient's city (or township, or village) of residence

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*HomeCity*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element (five digit FIPS code)

Additional Information

- Auto-Calculated if ZIP code and Country are completed
- Only complete when ZIP code is "Not Recorded / Not Known"
- Used to calculate FIPS code

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_05 from the 2012 National Trauma Data Standard

National Element

TR 1.22

PATIENT'S HOME COUNTY *

Data Format [combo] single-choice

Definition

The patient's county (or parish) of residence

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*HomeCounty*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element (three digit FIPS code)

Additional Information

- Auto-Calculated if ZIP code and Country are completed
- Only complete when ZIP code is "Not Recorded / Not Known"
- Used to calculate FIPS code

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_04 from the 2012 National Trauma Data Standard

National Element

TR 1.23

PATIENT'S HOME STATE *

Data Format [combo] single-choice

Definition

The state (territory, province, or District of Columbia) where the patient resides

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*HomeState*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element (two digit numeric FIPS code)

Additional Information

- Auto-Calculated if ZIP code and Country are completed
- Only complete when ZIP code is "Not Recorded / Not Known"
- Used to calculate FIPS code

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_03 from the 2012 National Trauma Data Standard

National Element

TR 1.13

PATIENT'S ALTERNATE RESIDENCE *

Data Format [combo] single-choice

Definition

Documentation of the type of patient without a home zip code

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*HomeResidence*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Homeless
2 Undocumented Citizen
3 Migrant Worker
4 Foreign Visitor

Additional Information

- Only complete when ZIP code is "Not Applicable"
- Home is defined as a person who lacks housing. The definition also includes a person living in transitional housing or a supervised public or private facility providing temporary living quarters
- Undocumented Citizen is defined as a national of another country who has entered or stayed in another country without permission
- Migrant Worker is defined as a person who temporarily leaves his/her principal place of residence within a country in order to accept seasonal employment in the same or different country
- Foreign Visitor is defined as any person legally visiting a country other than his/her usual place of residence for any reason

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

National Element

- National Element D_06 from the 2012 National Trauma Data Standard

TR 1.29

WOULD YOU LIKE TO PARTICIPATE IN THE FOLLOW-UP SURVEY

Data Format [combo] single-choice

Definition

Used for TBI Research at this time

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- No
- Yes

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- ED Admission Form
- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes

Injury Information

National Element

TR 5.4

LOCATION E-CODE *

Data Format [number]

Definition

E-Code used to describe the place/site/location of the injury event (E 849.X)

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*LocationEcode*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 9

Field Values

- Relevant ICD-9-CM code value for injury location

Additional Information

- ICD-9-CM Codes were retained over ICD-10 due to CMS's continued use of ICD-9
- To update at the onset of ICD-10 estimated to be October 1, 2013

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_07 from the 2012 National Trauma Data Standard

National Element

TR 5.6

INCIDENT LOCATION ZIP CODE*

Data Format [text]

Definition

The ZIP code of the incident location

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*InjuryZip*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Stored as a 5 digit code
- When completed with Country, the city, county, and state auto-calculate
- If "Not Applicable", "Not Recorded / Not Known" complete variables: Incident State, Incident County, and Incident City
- May require adherence to HIPAA regulations

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_09 from the 2012 National Trauma Data Standard

National Element

TR 5.11

INCIDENT COUNTRY *

Data Format [combo] single-choice

Definition

The country where the patient was found or to which the unit responded (or best approximation)

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*IncidentCountry*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Only complete when Incident Location Zip Code is "Not Applicable" or "Not Recorded / Not Known"
- When completed with Zip Code, the city, county, and state auto-calculate

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_10 from the 2012 National Trauma Data Standard

National Element

TR 5.10

INCIDENT CITY *

Data Format [combo] single-choice

Definition

The city or township where the patient was found or to which the unit responded (or best approximation)

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*IncidentCity*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element (five digit FIPS code)

Additional Information

- Only complete when Incident Location Zip Code is "Not Applicable", "Not Recorded", or "Not Known"
- Auto-Calculated if ZIP code and Country are completed
- Used to calculate FIPS code

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_13 from the 2012 National Trauma Data Standard

National Element

TR 5.9

INCIDENT COUNTY *

Data Format [combo] single-choice

Definition

The county or parish where the patient was found or to which the unit responded (or best approximation)

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*IncidentCounty*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element (three digit FIPS code)

Additional Information

- Only complete when Incident Location Zip Code is "Not Applicable", "Not Recorded", or "Not Known"
- Auto-Calculated if ZIP code and Country are completed
- Used to calculate FIPS code

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_12 from the 2012 National Trauma Data Standard

National Element

TR 5.7

INCIDENT STATE *

Data Format [combo] single-choice

Definition

The state, territory, or province where the patient was found or to which the unit responded (or best approximation)

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*IncidentState*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element (two digit FIPS code)

Additional Information

- Only complete when Incident Location Zip Code is "Not Applicable", "Not Recorded", or "Not Known"
- Auto-Calculated if ZIP code and Country are completed
- Used to calculate FIPS code

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_11 from the 2012 National Trauma Data Standard

(Complaint) Supplemental Cause of Injury

Data Format [combo] single-choice

Definition

The event that occurred to cause injury to the patient

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Accident
- Aircraft
- All Terrain Vehicle
- Assault
- Bicycle Crash
- Boating
- Burn
- Child Abuse
- Dirt Bike
- Diving
- Domestic Abuse
- Drowning
- Electrical Injury
- Fall
- Farm/Heavy
- Equipment/Machine
- Fire
- Fireworks Related
- Frostbite
- Gunshot Wound
- Hanging
- Heat Related
- Industrial Incident
- Injured by Animal
- Jet Ski
- Lightning
- Motor Pedestrian Crash
- Motor Vehicle Crash
- Motorcycle Crash
- Police
- Rape
- Rollerblading
- Rollerskating
- Scooter
- Skateboarding
- Skydiving
- Sledding
- Snowboarding
- Snowmobile
- Sport Related
- Stab Wound
- Tornado
- Train
- Waterskiing

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes

INJURY DESCRIPTION

Data Format [text]

Definition

The description of the injury. This can be any supporting or supplemental data about the injury, other circumstances, etc.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- History & Physical Documentation
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

TR 20.1

PRIMARY E-CODE *

Data Format [number]

Definition

E-Code used to describe the mechanism (or external factor) that caused the injury event

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*PrimaryEcode*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant ICD-9-CM code value for injury event

Additional Information

- The Primary E-code should describe the main reason a patient is admitted to the hospital
- E-codes are used to auto-generate two calculated fields: Trauma Type: (Blunt, Penetrating, Burn) and Intentionality (based upon CDC matrix)
- ICD-9-CM Codes were retained over ICD-10 due to CMS's continued use of ICD-9
- To update at the onset of ICD-10 estimated to be October 1, 2013

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_06 from the 2012 National Trauma Data Standard

National Element

TR 20.2

ADDITIONAL E-CODE *

Data Format [number]

Definition

Additional E-Code used to describe, for example, a mass casualty event, or other external cause

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*AdditionalEcode*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant ICD-9-CM code value for injury event

Additional Information

- E-codes are used to auto-generate two calculated fields: Trauma Type: (Blunt, Penetrating, Burn) and Intentionality (based upon CDC matrix)
- ICD-9-CM Codes were retained over ICD-10 due to CMS's continued use of ICD-9
- To update at the onset of ICD-10 estimated to be October 1, 2013

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_08 from the 2012 National Trauma Data Standard

National Element

AIRBAG PRESENT *

Data Format [combo] single-choice

Definition

Airbag in use by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

8 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_16 from the 2012 National Trauma Data Standard

AIRBAG NOT DEPLOYED *

Data Format [combo] single-choice

Definition

Indication of no airbag deployment during a motor vehicle crash

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AirbagDeployment*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Yes • No

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Additional Information

- Only completed when 'Airbag Present' is marked "Yes"

National Element

- National Element I_16 from the 2012 National Trauma Data Standard

AIRBAG DEPLOYED SIDE *

Data Format [combo] single-choice

Definition

Indication of airbag deployment on either side of the vehicle during a motor vehicle crash

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AirbagDeployment*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

3 Yes • No

Additional Information

- Evidence of the use of airbag deployment may be reported or observed
- Only completed when 'Airbag Present' is marked "Yes"

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_16 from the 2012 National Trauma Data Standard

AIRBAG DEPLOYED FRONT *

Data Format [combo] single-choice

Definition

Indication of airbag deployment in the front of the vehicle during a motor vehicle crash

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AirbagDeployment*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

2 Yes

- No

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Additional Information

- "Airbag Deployed Front" should be used for patients with documented airbag deployments, that are not further specified
- Evidence of the use of airbag deployment may be reported or observed
- Only completed when 'Airbag Present' is marked "Yes"

National Element

- National Element I_16 from the 2012 National Trauma Data Standard

AIRBAG DEPLOYED OTHER *

Data Format [combo] single-choice

Definition

Indication of airbag deployment of the knee, airbelt, curtain, etc. during a motor vehicle crash

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AirbagDeployment*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

4 Yes • No

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Additional Information

- Evidence of the use of airbag deployment may be reported or observed
- Only completed when 'Airbag Present' is marked "Yes"

National Element

- National Element I_16 from the 2012 National Trauma Data Standard

National Element

TR 29.13

CHILD RESTRAINT *

Data Format [combo] single-choice

Definition

Protective child restraint devices used by patient at the time of injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

6 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_15 from the 2012 National Trauma Data Standard

National Element

TR 29.16

INFANT CAR SEAT *

Data Format [combo] single-choice

Definition

Infant Car Seat in use by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ChildSpecificRestraint*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

2 Yes

- No

Additional Information

- Evidence of the use of child restraint may be reported or observed
- Only completed when 'Child Restraint' is marked "Yes"

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_15 from the 2012 National Trauma Data Standard

National Element

TR 29.15

CHILD CAR SEAT *

Data Format [combo] single-choice

Definition

Child Car Seat in use by the patient at the time of injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ChildSpecificRestraint*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Yes

- No

Additional Information

- Evidence of the use of child restraint may be reported or observed
- Only completed when 'Child Restraint' is marked "Yes"

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_15 from the 2012 National Trauma Data Standard

National Element

TR 29.17

CHILD BOOSTER SEAT *

Data Format [combo] single-choice

Definition

Child Booster Seat in use by the patient at the time of injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ChildSpecificRestraint*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

3 Yes

- No

Additional Information

- Evidence of the use of child restraint may be reported or observed
- Only completed when 'Child Restraint' is marked "Yes"

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_15 from the 2012 National Trauma Data Standard

THREE POINT RESTRAINT *

Data Format [combo] single-choice

Definition

Three Point Restraint in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

2, 10 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed
- If documentation indicates "Three Point Restraint", "Lap Belt" and "Shoulder Belt" are automatically selected, as well

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

LAP BELT *

Data Format [combo] single-choice

Definition

Lap Belt in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

2 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed
- Lap Belt should be used to include those patients that are restrained, but not further specified
- If documentation indicates "Three Point Restraint", "Lap Belt" and "Shoulder Belt" are automatically selected, as well

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

SHOULDER BELT *

Data Format [combo] single-choice

Definition

Shoulder Belt in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

10 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed
- If documentation indicates "Three Point Restraint", "Lap Belt" and "Shoulder Belt" are automatically selected, as well

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

National Element

PERSONAL FLOATATION *

Data Format [combo] single-choice

Definition

Personal Floatation Device in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

3 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

EYE PROTECTION *

Data Format [combo] single-choice

Definition

Eye Protection in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

5 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

HELMET *

Data Format [combo] single-choice

Definition

Helmet (e.g., bicycle, skiing, motorcycle) in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

7 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

National Element

TR 29.7

PROTECTIVE CLOTHING *

Data Format [combo] single-choice

Definition

Protective clothing (e.g., padded leather pants) in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

9 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

PROTECTIVE NON-CLOTHING GEAR *

Data Format [combo] single-choice

Definition

Protective non-clothing gear (e.g., shin guard) in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevice*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

4 Yes

- No

Additional Information

- Evidence of the use of safety equipment may be reported or observed

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

National Element

TR 29.9

OTHER *

Data Format [combo] single-choice

Definition

Other protective equipment in use or worn by the patient at the time of the injury

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ProtectiveDevices*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

11 Yes • No

Additional Information

- Evidence of the use of safety equipment may be reported or observed
- If "Yes" is selected, please describe in the box labeled "Safety Description"

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_14 from the 2012 National Trauma Data Standard

SAFETY (Equipment) DESCRIPTION

Data Format [text]

Definition

Other protective equipment in use or worn by the patient at the time of the injury

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Evidence of the use of safety equipment may be reported or observed
- Only completed if Other is "Yes"

Data Source

- EMS Run Sheet
- Triage Form/Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

Pre-Hospital Information

TR 16.22

ARRIVED FROM

Data Format [combo] single-choice

Definition

Location the patient arrived from

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Scene
- Clinic / MD Office
- Home
- Jail
- Nursing Home
- Referring Hospital

Data Source

- EMS Run Sheet
- 911 or Dispatch Center
- Other ED Documentation

TRANSPORTED TO YOUR FACILITY BY (EMS Transport Party)

Data Format [combo] single-choice

Definition

The party of transport delivering the patient to the hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Advanced Life Support (ALS)
- Basic Life Support (BLS)
- Helicopter Ambulance
- Police
- Private/Public Vehicle/Walk-In

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

MASS CASUALTY INCIDENT

Data Format [combo] single-choice

Definition

Indicator if this event would be considered a mass casualty incident (overwhelmed existing EMS resources).

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- No
- Yes

Data Source

- EMS Run Sheet
- Trauma Flow Sheet
- 911 or Dispatch Center
- Other ED Documentation

PREGNANCY

Data Format [combo] single-choice

Definition

Indication of the possibility that the patient is currently pregnant

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- No
- Yes

Data Source

- EMS Run Sheet
- 911 or Dispatch Center
- Other ED Documentation

TR 14.39

WEIGHT (Estimated Body Weight)

Data Format [integer]

Definition

The patient's body weight in kilograms, either measured or estimated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- If pounds are entered, converts to kilograms
- If kilograms are entered, converts to pounds

Data Source

- EMS Run Sheet
- Other ED Documentation

LAW ENFORCEMENT / CRASH REPORT NUMBER

Data Format [text]

Definition

The unique number associated with the law enforcement or crash report

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- Other ED Documentation

Uses

- Allows linkage at a later date to other State Agencies

VEHICULAR INJURY INDICATORS

Data Format [combo] single-choice

Definition

The kind of risk factor predictors associated with the vehicle involved in the incident

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Dash Deformity
- DOA Same Vehicle
- Ejection
- Fire
- Rollover / Roof Deformity
- Side Post Deformity
- Space Intrusion > 1 Foot
- Steering Wheel Deformity
- Windshield Spider / Star

Data Source

- EMS Run Sheet
- Other ED Documentation

TR 14.42

AREA OF THE VEHICLE IMPACTED (by the Collision)

Data Format [combo] single-choice

Definition

The area or location of initial impact on the vehicle involved in the incident

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Center Front
- Center Rear
- Left Front
- Left Rear
- Left Side
- Right Front
- Right Rear
- Right Side
- Roll Over

Data Source

- EMS Run Sheet
- Other ED Documentation

SEAT ROW LOCATION (of Patient in Vehicle)

Data Format [number]

Definition

The seat row location of the patient in vehicle at the time of the crash with the front seat numbered as 1

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- Other ED Documentation

POSITION OF PATIENT (in the seat of the vehicle)

Data Format [combo] single-choice

Definition

The seat position of the patient in the vehicle at the time of the crash

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Driver
- Left (Non-driver)
- Middle
- Other
- Right

Data Source

- EMS Run Sheet
- Other ED Documentation

HEIGHT OF FALL

Data Format [number]

Definition

The distance in feet the patient fell, measured from the lowest point to the ground

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- Other ED Documentation

BARRIERS TO PATIENT CARE

Data Format [combo] multiple-choice

Definition

Indication of whether or not there were any patient specific barriers to serving the patient at the scene

Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values

Field Values

- Developmentally Impaired
- None
- Speech Impaired
- Not Available
- Hearing Impaired
- Physically Impaired
- Unattended or Unsupervised (including minors)

Data Source

- EMS Run Sheet
- Other ED Documentation

EMS RUN NUMBER

Data Format [text]

Definition

The run number assigned and entered on the run sheet of the primary emergency service, specific to the individual run/patient

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- Other ED Documentation

NAME OF EMS SERVICE

Data Format [combo] single-choice

Definition

The name of the EMS service that transferred the patient

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- Other ED Documentation

National Element

TR 9.1

EMS DISPATCH DATE *

Data Format [date]

Definition

The date the unit *transporting to your hospital* was notified by dispatch

- For inter facility transfer patients, this is the date on which the unit transporting the patient to your facility from the transferring facility was notified by dispatch or assigned to this transport
- For patients transported from the scene of injury to your hospital, this is the date on which the unit transporting the patient to your facility from the scene was dispatched

XSD Data Type	*xs: date*	**XSD Element / Domain (Simple Type)**	*EMSNotifyDate*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1990	**Max. Constraint:** 2030

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Used to auto-generate an additional calculated field: Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

National Element

- National Element P_01 from the 2012 National Trauma Data Standard

National Element

TR 9.10

EMS DISPATCH TIME *

Data Format [time]

Definition

The time the unit *transporting to your hospital* was notified by dispatch

- For inter facility transfer patients, this is the time at which the unit transporting the patient to your facility from the transferring facility was notified by dispatch or assigned to this transport
- For patients transported from the scene of injury to your hospital, this is the time at which the unit transporting the patient to your facility from the scene was dispatched

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*EMSNotifyTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Used to auto-generate an additional calculated field: Total EMS Time (elapsed time from EMS dispatch to hospital arrival)

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

National Element

- National Element P_02 from the 2012 National Trauma Data Standard

(EMS Unit) ARRIVAL TIME AT SCENE *

Data Format [time]

Definition

The time the unit *transporting to your hospital* arrived on the scene (time time the vehicle stopped moving)

- For inter facility transfer patients, this is the time at which the unit transporting the patient to your facility from the transferring facility arrived at the transferring facility (arrival is defined as date/time when the vehicle stopped moving)
- For patients transported from the scene of injury to your hospital, this is the time at which the unit transporting the patient to your facility from the scene arrived at the scene (arrival is defined as date/time when the vehicle stopped moving)

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*EMSArrivalTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- Scene may be defined as "initial hospital" for inter-facility transfers
- HHMM should be collected as military time
- Used to auto-generate two additional calculated fields: Total EMS Response Time (elapsed time from EMS dispatch to scene arrival) & Total EMS Scene Time (elapsed time from EMS scene arrival to scene departure)

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

National Element

- National Element P_04 from the 2012 National Trauma Data Standard

National Element

(EMS Unit) SCENE DEPARTURE TIME *

Data Format [time]

Definition

The time the unit *transporting to your hospital* left the scene (time time the vehicle started moving)

- For inter facility transfer patients, this is the time at which the unit transporting the patient to your facility from the transferring facility departed from the transferring facility (departure is defined as date/time when the vehicle started moving)
- For patients transported from the scene of injury to your hospital, this is the time at which the unit transporting the patient to your facility from the scene departed from the scene (departure is defined as date/time when the vehicle started moving)

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*EMSLeftTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- Scene may be defined as "initial hospital" for inter-facility transfers
- HHMM should be collected as military time
- Used to auto-generate an additional calculated field: Total EMS Scene Time (elapsed time from EMS scene arrival to scene departure)

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

National Element

- National Element P_06 from the 2012 National Trauma Data Standard

UNIT ARRIVED HOSPITAL TIME

Data Format [time]

Definition

The time the EMS agency transporting to your hospital arrived at your hospital.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HH:MM
- Scene may be defined as "initial hospital" for inter-facility transfers
- HH:MM should be collected as military time

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

National Element

TR 8.10

TRANSPORT MODE *

Data Format [combo] single-choice

Definition

The mode of transport delivering the patient to your hospital

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*TransportMode*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Ambulance
2 Helicopter
3 Fixed Wing
4 Private/Public Vehicle/Walk-In
5 Police, CPS Personnel
6 Other

Data Source

- EMS Run Sheet
- 911 or Dispatch Center

National Element

- National Element P_07 from the 2012 National Trauma Data Standard

TR 18.97

(Pre-Hospital Thoracentesis) / TUBE THORACOSTOMY

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of EMS

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Performed

Data Source

- EMS Run Sheet
- Other ED Documentation

TR 15.39

(Pre-Hospital) CPR PERFORMED

Data Format [combo] single-choice

Definition

Indication as to if CPR management was conducted while under the care of EMS

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Performed

Data Source

- EMS Run Sheet
- Other ED Documentation

TR 18.96

(Pre-Hospital) NEEDLE THORACOSTOMY

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of EMS

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Performed

Data Source

- EMS Run Sheet
- Other ED Documentation

TR 15.40

(Pre-Hospital) AIRWAY MANAGEMENT

Data Format [combo] single-choice

Definition

Indication as to whether a device or procedure was used to prevent or correct obstructed respiratory passage while under the care of EMS

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Bag & Mask
- Combitube
- Cricoid
- King's Airway
- LMA
- Nasal Cannula
- Non-rebreather mask
- Nasal ETT
- Oral Airway
- Oral ETT
- Trach
- Not Performed

Data Source

- EMS Run Sheet
- Other ED Documentation

(Pre-Hospital) FLUIDS

Data Format [combo] single-choice

Definition

Indication as to the amount of IV fluids that were administered to the patient while under the care of EMS

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- < 500
- 500-2000
- > 2000
- IVF Attempted
- IVF Unknown Amount

Data Source

- EMS Run Sheet
- Other ED Documentation

(Pre-Hospital) DESTINATION DETERMINATION

Data Format [combo] single-choice

Definition

Major reason for transferring the patient to the facility chosen

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Closet Facility
- Diversion
- Hospital of Choice
- On-Line Medical Direction
- Other
- Specialty Resource Center

Data Source

- EMS Run Sheet
- Other ED Documentation

TR 15.31

(Pre-Hospital) MEDICATIONS

Data Format [combo] multiple-choice

Definition

Medications given to the patient while under the care of EMS

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- EMS Run Sheet
- Other ED Documentation

TR18.106

(Pre-Hospital) VITALS DATE

Data Format [date]

Definition

Date of first recorded vital signs in the Pre-Hospital setting

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as MM/DD/YYYY

Data Source

- EMS Run Sheet
- Other ED Documentation

TR18.110

(Pre-Hospital) VITALS TIME

Data Format [time]

Definition

Time of first recorded vital signs in the Pre-Hospital setting

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as HHMM
- HHMM should be collected as military time

Data Source

- EMS Run Sheet
- Other ED Documentation

INITIAL FIELD GCS – EYE *

Data Format [number]

Definition

First recorded Glasgow Coma Score (Eye) in the pre-hospital setting

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsGcsEye*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 4

Field Values

1 No eye movement when assessed
2 Opens eyes in response to painful stimulation
3 Opens eyes in response to verbal stimulation
4 Opens eyes spontaneously

Additional Information

- Used to calculate Overall GCS - EMS Score
- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- EMS Run Sheet

National Element

- National Element P_13 from the 2012 National Trauma Data Standard

National Element

TR 18.61.2 / TR 18.61.0 (ped)

INITIAL FIELD GCS – VERBAL *

Data Format [number]

Definition

First recorded Glasgow Coma Score (Verbal) in the pre-hospital setting

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsGcsVerbal*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 5

Field Values

Pediatric (≤ 2 years):

1 No vocal response
2 Inconsolable, agitated
3 Inconsistently consolable, moaning
4 Cries but is consolable, inappropriate interactions
5 Smiles, oriented to sounds, follows objects, interacts

Adult:

1 No vocal response
2 Incomprehensible sounds
3 Inappropriate words
4 Confused
5 Oriented

Additional Information

- Used to calculate Overall GCS - EMS Score
- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- EMS Run Sheet

National Element

- National Element P_14 from the 2012 National Trauma Data Standard

National Element

TR 18.62.2 / TR 18.62.0 (ped)

INITIAL FIELD GCS – MOTOR *

Data Format [number]

Definition

First recorded Glasgow Coma Score (Motor) in the pre-hospital setting

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsGcsMotor*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 6

Field Values

Pediatric (≤ 2 years):

1 No motor response
2 Extension to pain
3 Flexion to pain
4 Withdrawal from pain
5 Localizing pain
6 Appropriate response to stimulation

Adult:

1 No motor response
2 Extension to pain
3 Flexion to pain
4 Withdrawal from pain
5 Localizing pain
6 Obeys commands

Additional Information

- Used to calculate Overall GCS - EMS Score
- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- EMS Run Sheet

National Element

- National Element P_15 from the 2012 National Trauma Data Standard

(Initial Field) GCS QUALIFIER (UP TO 3)

Data Format [combo] single-choice

Definition

Documentation of factors potentially affecting the first assessment of GCS before arrival in the ED/hospital

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*EmsGcsQualifier*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

1 Patient chemically sedated or paralyzed
2 Obstruction to the Patient's Eye
3 Patient Intubated
4 Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to the eye

Additional Information

- To select more than 1, hold down the Shift Key
- Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.)

Data Source

- EMS Run Sheet

National Element

(Initial Field) SYSTOLIC BLOOD PRESSURE *

Data Format [number]

Definition

First recorded systolic blood pressure in the pre-hospital setting

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*EmsSbp*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 400

Field Values

- Relevant value for data element

Additional Information

- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded
- Used to auto-generate an additional calculated field: Revised Trauma Score - EMS (adult & pediatric)

Data Source

- EMS Run Sheet

National Element

- National Element P_09 from the 2012 National Trauma Data Standard

TR 18.68

(Initial Field) DIASTOLIC BLOOD PRESSURE

Data Format [number]

Definition

First recorded diastolic blood pressure in the pre-hospital setting

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded

Data Source

- EMS Run Sheet

National Element

TR 18.69

(Initial Field) PULSE RATE *

Data Format [number]

Definition

First recorded pulse in the pre-hospital setting (palpated or auscultated), expressed as a number per minute

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsPulseRate*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 299

Field Values

- Relevant value for data element

Additional Information

- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded

Data Source

- EMS Run Sheet

National Element

- National Element P_10 from the 2012 National Trauma Data Standard

(Initial Field) RESPIRATORY RATE *

Data Format [number]

Definition

First recorded respiratory rate in the pre-hospital setting (expressed as a number per minute)

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsRespiratoryRate*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 100

Field Values

- Relevant value for data element

Additional Information

- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded
- Used to auto-generate an additional calculated field: Revised Trauma Score - EMS (adult & pediatric)

Data Source

- EMS Run Sheet

National Element

- National Element P_11 from the 2012 National Trauma Data Standard

(Initial Field) SP02 (Oxygen Saturation) *

Data Format [number]

Definition

First recorded oxygen saturation in the pre-hospital setting (expressed as a percentage).

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsPulseOximetry*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 100

Field Values

- Relevant value for data element

Additional Information

- If the patient is transferred to your facility with no EMS run sheet from the scene of the injury, record as Not Known / Not Recorded

Data Source

- EMS Run Sheet

National Element

- National Element P_12 from the 2012 National Trauma Data Standard

National Element

TR 18.64

INITIAL FIELD GCS – TOTAL *

Data Format [number]

Definition

First recorded Glasgow Coma Score (total) in the pre-hospital setting

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *EmsTotalGcs*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 3	**Max. Constraint:** 15

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Used to auto-generate an additional calculated field: Revised Trauma Score - EMS (adult & pediatric)
- If a patient does not have a numeric GCS score recorded, but with documentation related to their level of consciousness such as "AAOx3", "awake alert and oriented", or "patient with normal mental status", interpret this as GCS of 15, IF there is no other contradicting documentation
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- EMS Run Sheet

National Element

- National Element P_16 from the 2012 National Trauma Data Standard

TR 18.66

(Pre-Hospital Revised Trauma Score) RTS (Total)

Data Format [number]

Definition

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the pre-hospital setting.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 4

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Auto-generated if Initial Field GCS - Total is entered

Data Source

- EMS Run Sheet

TR 18.80

(Pre-Hospital) RESPIRATORY ASSISTANCE

Data Format [combo] single-choice

Definition

The determination of mechanical and/or external support of respiration

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

1 Unassisted Respiratory Rate
2 Assisted Respiratory Rate

Data Source

- EMS Run Sheet

Referring Hospital Information

TRANSPORTED TO REFERRING FACILITY BY

Data Format [combo] single-choice

Definition

The mode of transport delivering the patient to the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- ALS Ground Ambulance
- ALS Helicopter
- BLS Ground Ambulance
- BLS Helicopter
- Other
- Police
- Private/Public Vehicle/Walk-In

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL NAME

Data Format [combo] single-choice

Definition

Name of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL ARRIVAL DATE

Data Format [date]

Definition

The date the patient arrived at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL ARRIVAL TIME

Data Format [time]

Definition

The time the patient arrived at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL DISCHARGE DATE

Data Format [date]

Definition

The date the patient was discharged from the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL DISCHARGE TIME

Data Format [time]

Definition

The time the patient was discharged from the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

Data Source

- Referring Hospital Medical Record Information

REFERRING HOSPITAL PHYSICIAN NAME

Data Format [text]

Definition

The name of the patient's referring physician

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Minimum Constraint: 0	**Maximum Constraint:** 50

Field Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) GCS - EYE

Data Format [number]

Definition

First recorded Glasgow Coma Score (Eye) at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 1	**Max. Constraint:** 4

Field Values

- No eye movement when assessed
- Opens eyes in response to painful stimulation
- Opens eyes in response to verbal stimulation
- Opens eyes spontaneously

Additional Information

- Used to calculate Overall GCS – Referring Hospital Score
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) GCS - VERBAL

Data Format [number]

Definition

First recorded Glasgow Coma Score (Verbal) at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 1	**Max. Constraint:** 5

Field Values

Pediatric (≤ 2 years):

- No vocal response
- Inconsolable, agitated
- Inconsistently consolable, moaning
- Cries but is consolable, inappropriate interactions
- Smiles, oriented to sounds, follows objects, interacts

Adult:

- No vocal response
- Incomprehensible sounds
- Inappropriate words
- Confused
- Oriented

Additional Information

- Used to calculate Overall GCS – Referring Hospital Score
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) GCS - MOTOR

Data Format [number]

Definition

First recorded Glasgow Coma Score (Motor) at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 1	**Max. Constraint:** 6

Field Values

Pediatric (≤ 2 years):

- No motor response
- Extension to pain
- Flexion to pain
- Withdrawal from pain
- Localizing pain
- Appropriate response to stimulation

Adult:

- No motor response
- Extension to pain
- Flexion to pain
- Withdrawal from pain
- Localizing pain
- Obeys commands

Additional Information

- Used to calculate Overall GCS – Referring Hospital Score
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) GCS Assessment QUALIFIERS (UP TO 3)

Data Format [combo] multiple-choice

Definition

Documentation of factors potentially affecting the first assessment of GCS upon arrival to the referring hospital

Multiple Entry Configuration	Yes, max 3	**Accepts Null Value**	Yes, common null values

Field Values

- Patient chemically sedated
- Patient Intubated
- Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to the eye
- Obstruction to the Patient's Eye

Additional Information

- Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.)
- To select more than 1, hold down the Shift Key

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) TEMPERATURE

Data Format [number]

Definition

First recorded temperature (in degrees Celsius [centigrade]) at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 45°C

Field Values

- Relevant value for data element
- Used to auto-generate an additional calculated field: Temperature in degrees Fahrenheit

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) SYSTOLIC BLOOD PRESSURE

Data Format [number]

Definition

First recorded systolic blood pressure at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 299

Field Values

- Relevant value for data element

Additional Information

- Used to auto-generate an additional calculated field: Revised Trauma Score - Referring Hospital (adult & pediatric)

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) DIASTOLIC BLOOD PRESSURE

Data Format [number]

Definition

First recorded diastolic blood pressure at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 299

Field Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) PULSE RATE

Data Format [number]

Definition

First recorded pulse at the referring hospital (palpated or auscultated), expressed as a number per minute

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 299

Field Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) RESPIRATORY RATE

Data Format [number]

Definition

First recorded respiratory rate at the referring hospital (expressed as a number per minute)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 120

Field Values

- Relevant value for data element

Additional Information

- Used to auto-generate an additional calculated field: Revised Trauma Score - Referring Hospital (adult & pediatric)

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) RESPIRATORY ASSISTANCE

Data Format [combo] single-choice

Definition

Determination of the mechanical and/or external support of respiration

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Unassisted Respiratory Rate
- Assisted Respiratory Rate

Additional Information

- Only Completed if "Respiratory Rate" is completed

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) SP02 (Oxygen Saturation)

Data Format [number]

Definition

First recorded oxygen saturation at the referring hospital (expressed as a percentage)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 100

Field Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) MANUAL GCS TOTAL

Data Format [number]

Definition

First recorded Glasgow Coma Score (total) at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 3	**Max. Constraint:** 15

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Used to auto-generate an additional calculated field: Revised Trauma Score - Referring Hospital (adult & pediatric)
- If a patient does not have a numeric GCS score recorded, but with documentation related to their level of consciousness such as "AAOx3", "awake alert and oriented", or "patient with normal mental status", interpret this as GCS of 15, IF there is no other contradicting documentation
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital Revised Trauma Score) RTS (Total)

Data Format [number]

Definition

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient at the referring hospital setting.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 4

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Auto-generated if Manual GCS - Total is entered

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital Pediatric Trauma Score) PTS (Total)

Data Format [number]

Definition

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient at the referring hospital setting for a pediatric patient.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: -6	**Max. Constraint:** 12

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score

Data Source

- Referring Hospital Medical Record Information

TR 33.18

(Referring) HOSPITAL ICU

Data Format [combo] single-choice

Definition

Determination of whether or not the patient went to the ICU at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Yes
- No

Data Source

- Referring Hospital Medical Record Information
- Other ICU Documentation

(Referring) HOSPITAL OR

Data Format [combo] single-choice

Definition

Determination of whether or not the patient went to the OR at the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Yes
- No

Data Source

- Referring Hospital Medical Record Information
- Other OR Documentation

(Referring) CPR PERFORMED

Data Format [combo] single-choice

Definition

Indication as to if CPR management was conducted while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Yes
- No

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) CT HEAD (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) CT CERVICAL (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) CT ABD/PELVIS (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) CT CHEST (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) ABDOMINAL ULTRASOUND (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) AORTOGRAM (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) ARTERIOGRAM (Results)

Data Format [combo] single-choice

Definition

Indication as to if this procedure was performed while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Positive
- Negative

Data Source

- Referring Hospital Medical Record Information
- Radiology Report

(Referring Hospital) AIRWAY MANAGEMENT

Data Format [combo] single-choice

Definition

Indication as to whether a device or procedure was used to prevent or correct an obstructed airway passage while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Bag & Mask
- Combitube
- Cricoid
- LMA
- Nasal ETT
- Oral Airway
- Oral ETT
- Trach

Data Source

- Referring Hospital Medical Record Information
- Other ED Documentation

TR 33.29

(Referring Hospital) DESTINATION DETERMINATION

Data Format [combo] single-choice

Definition

The reason the facility transferred this patient to another acute care hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Hospital of Choice
- Specialty Resource Center

Data Source

- Referring Hospital Medical Record Information

(Referring Hospital) MEDICATIONS

Data Format [combo] multiple-choice

Definition

Indication as to which, if any, medications were administered to the patient while under the care of the referring hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Referring Hospital Medical Record Information

ED / Acute Care Information

DIRECT ADMIT TO HOSPITAL

Data Format [combo] single-choice

Definition

Indicates if the patient was a direct admission

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- No
- Yes

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Registration
- Hospital Discharge Summary

National Element

TR 18.55

DATE ARRIVED IN ED/ACUTE CARE *

Data Format [date]

Definition

The date the patient arrived to the ED / Hospital

XSD Data Type *xs: date*		**XSD Element / Domain (Simple Type)** *HospitalArrivalDate*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1990	**Max. Constraint:** 2030

Field Values

- Relevant value for data element

Additional Information

- If the patient was brought to the ED, enter date patient arrived at ED. If patient was directly admitted to the hospital, enter date patient was admitted to the hospital
- Collected as MM/DD/YYYY
- Used to auto-generate two additional calculated fields: Total EMS Time: (elapsed time from EMS dispatch to hospital arrival) and Total Length of Hospital Stay (elapsed time from ED / Hospital Arrival to ED / Hospital Discharge)

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

National Element

- National Element ED_01 from the 2012 National Trauma Data Standard

National Element

TR 18.56

TIME ARRIVED IN ED/ACUTE CARE *

Data Format [time]

Definition

The time the patient arrived at the ED / Hospital

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*HospitalArrivalTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- If the patient was brought to the ED, enter time patient arrived at ED. If patient was directly admitted to the hospital, enter time patient was admitted to the hospital
- Collected as HHMM
- HHMM should be collected as military time
- Used to auto-generate two additional calculated fields: Total EMS Time: (elapsed time from EMS dispatch to hospital arrival) and Total Length of Hospital Stay (elapsed time from ED / Hospital Arrival to ED / Hospital Discharge)

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

National Element

- National Element ED_02 from the 2012 National Trauma Data Standard

TRAUMA TEAM ACTIVATED

Data Format [radio]

Definition

Level of Trauma Team activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Activated
- Level 1
- Level 2
- Level 3
- Level 4

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

DATE TRAUMA TEAM ACTIVATED

Data Format [date]

Definition

The date the trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

TIME TRAUMA TEAM ACTIVATED

Data Format [time]

Definition

The time the trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

ED PHYSICIAN

Data Format [combo] single-choice

Definition

The name of the ED Physician called when trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

(Trauma Team Member) SERVICE TYPE

Data Format [combo] single-choice

Definition

The specialty of the physician called for the Trauma Team Activation

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Anesthesia
- Emergency Medicine
- Family Practice
- Neurosurgery
- Nurse Practitioner
- Orthopedic Surgery
- Physician Assistant
- Surgery Senior Resident
- Surgery / Trauma

Additional Information

- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

DATE (Trauma Team Physician) CALLED

Data Format [date]

Definition

The date the physician was called when the trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

TIME (Trauma Team Physician) CALLED

Data Format [time]

Definition

The time the physician was called when the trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

TR 17.15

DATE (Trauma Team Physician) ARRIVED

Data Format [date]

Definition

The date the physician arrived when the trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

TIME (Trauma Team Physician) ARRIVED

Data Format [time]

Definition

The time the physician arrived when the trauma team was activated

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Trauma Team is activated

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Trauma Team) TIMELY ARRIVAL

Data Format [combo] single-choice

Definition

Did the ED physician respond to the call to see the patient in a timely manner?

Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values

Field Values

- Yes
- No

Additional Information

- Only completed if Trauma Team is activated
- Criteria for timely arrival is defined by the facility

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

ADMITTING MD/STAFF

Data Format [combo] single-choice

Definition

Physician or staff member's name to which the patient is designated upon admission to the facility

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

ADMITTING SERVICE

Data Format [combo] single-choice

Definition

The department within the hospital that admitted the patient after being discharged from the ED

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Medicine
- Neurosurgery
- Orthopedics
- Pedi Surgery
- Surgery Subspecialty
- Trauma

Additional Information

- Burn, OMFS, Hand, etc. fall under "Surgery Subspecialty"

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

CONSULTING SERVICES

Data Format [combo] single-choice

Definition

The determination that consulting services were provided

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Yes
- No

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

(Consulting) SERVICE TYPE

Data Format [combo] single-choice

Definition

The specialty of any consults made during the patient's time at the hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Acute Rehabilitation Medicine
- Anesthesia
- Bariatric
- Burn
- Cardiology
- Cardiothoracic Surgery
- Chemical Dependence
- Critical Care Medicine
- Critical Care Surgery
- Dentistry
- Dermatology
- Endocrinology
- Ear Nose Throat
- Family Medicine
- Gastroenterology
- General Surgery
- Geriatric
- Gynecology
- Hand
- Hematology Oncology
- Infectious Disease
- Internal Medicine
- Kidney Transplant
- Liver
- Neonatal
- Nephrology
- Neurology
- Neurosurgery
- Obstetric
- Occuloplastic
- Ophthalmology
- Oral Maxillo Facial Surgery
- Orthopedic Surgeon
- Pain
- Pediatric Cardiology
- Pediatric Critical Care Medicine
- Pediatric Dentistry
- Pediatric Gastroenterology
- Pediatric Hematology Oncology
- Pediatric Infectious Disease
- Pediatric Nephrology
- Pediatric Neurology
- Pediatric Orthopedic
- Pediatric Pulmonary
- Plastic Surgeon
- Psychiatry
- Psychology
- Trauma Surgeon
- Rheumatology
- Urology
- Vascular Surgery

Additional Information

- Only completed if Consulting Services is "Yes"

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

CONSULTING STAFF

Data Format [combo] single-choice

Definition

Name of staff member that consulted on patient

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Consulting Services is "Yes"

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

DATE (Consulting Practitioner Requested)

Data Format [date]

Definition

The date the consultant was called

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if Consulting Services is "Yes"

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

TIME (Consulting Practitioner Requested)

Data Format [time]

Definition

The time the consultant was called

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if Consulting Services is "Yes"

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Hospital Registration
- Hospital Discharge Summary

National Element

TR 17.25

DATE DISCHARGED FROM ED *

Data Format [date]

Definition

The date the patient was discharged from the ED

XSD Data Type	*xs: date*	**XSD Element / Domain (Simple Type)**	*EdDischargeDate*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1990	**Max. Constraint:** 2030

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Used to auto-generate an additional calculated field: Total ED Time: (elapsed time from ED admit to ED discharge)
- If patient is directly admitted to the hospital, code as n/a
- Patient date/time of death consists of clinical documentation. If patient is considered a candidate for organ procurement, subsequent hospitalization date does not apply and procurement data should not be abstracted

Data Source

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

National Element

- National Element ED_19 from the 2012 National Trauma Data Standard

National Element

TR 17.26

(ED) DISCHARGE TIME *

Data Format [time]

Definition

The time the patient was discharged from the ED

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*EDDischargeTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Used to auto-generate an additional calculated field: Total ED Time: (elapsed time from ED admit to ED discharge)
- If patient is directly admitted to the hospital, code as n/a
- Patient date/time of death consists of clinical documentation. If patient is considered a candidate for organ procurement, subsequent hospitalization date does not apply and procurement data should not be abstracted

Data Source

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

National Element

- National Element ED_20 from the 2012 National Trauma Data Standard

National Element

TR 17.27

ED (Discharge) DISPOSITION *

Data Format [combo] single-choice

Definition

The disposition of the patient at the time of discharge from the ED

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*EdDischargeDisposition*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Floor bed (general admission, non specialty unit bed)
2 Observation Unit (unit that provides < 24 hour stays)
3 Telemetry / step-down unit (less acuity than ICU)
4 Home with Services
5 Died
6 Other (jail, institutional care, etc)
7 Operating Room
8 Intensive Care Unit (ICU)
9 Home without services
10 AMA (Left against medical advice)
11 Transferred to another hospital

Additional Information

- Based upon UB-04 disposition coding
- If the patient is directly admitted to the hospital, code as n/a
- If ED Discharge Disposition is "Home with services", "Other (jail, institutional care, mental health, etc.)", "Home without services", "Left against medical advice", or "Transferred to another hospital", then Hospital Discharge Date, Time, and Disposition should be NA

Data Source

1 Hospital Discharge Documentation
2 Nursing Progress Notes
3 Social Worker Notes
4 Other Hospital Documentation

National Element

- National Element ED_17 from the 2012 National Trauma Data Standard

ED DEATH (/ Signs of Life) *

Data Format [combo] single-choice

Definition

The type of death incurred while the patient was in the ED

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*DeathInEd*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Arrived with NO signs of life
2 Arrived with signs of life

Additional Information

- A patient with no signs of life is defined as having none of the following: organized EKG activity, papillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure. This usually implies the patient was brought to the ED with CPR in progress.
- Only completed if ED Disposition is "Died"

Data Source

- Triage Form / Trauma Flow Sheet
- ED Physician's Notes
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element ED_18 from the 2012 National Trauma Data Standard

(Operating Room) OR DISCHARGE DISPOSITION

Data Format [combo] single-choice

Definition

The disposition of the patient following post-anesthesia recovery

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Died
- Floor bed (general admission, non specialty unit bed)
- Home with Services
- Home without Services
- Intensive Care Unit (ICU)
- Left against medical advice (AMA)
- Observation unit (unit that provides < 24 hour stays)
- Other (jail, hospice, institution, etc.)
- Telemetry / step-down unit (less acuity than ICU)
- Transferred to another hospital

Additional Information

- Only completed if ED Disposition is "Operating Room"
- SICU, CCU, MICU fall under the ICU category

Data Source

- OR Nurses' Notes
- Operative Records

DATE OF DECISION TO TRANSFER

Data Format [date]

Definition

The date it was decided that the patient would be transferred

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Only completed if ED Disposition is "Transferred to another Hospital"

Data Source

- Triage Form / Trauma Flow Sheet
- ED Physician's Notes
- ED Nurses' Notes
- Other ED Documentation

TIME OF DECISION TO TRANSFER

Data Format [time]

Definition

The time it was decided that the patient would be transferred

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Only completed if ED Disposition is "Transferred to another Hospital"

Data Source

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

REASON FOR TRANSFER DELAY

Data Format [combo] single-choice

Definition

Reason for delay in transferring the patient

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- EMS issue
- Other
- Receiving hospital issue
- Referring Physician Decision Making
- Referring Hospital Issue - Radiology
- Weather or Natural Factors

Additional Information

- Only completed if ED Disposition is "Transferred to another Hospital"

Data Source

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

OTHER REASON FOR TRANSFER DELAY

Data Format [text]

Definition

Other reason for transfer delay that is not specific in the reason for transfer delay drop down menu

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Reason for Transfer Delay is "Other"

Data Source

- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation
- Hospital Discharge Summary
- Billing Sheet / Medical Records Summary Sheet

Initial Assessment Information

(Initial ED/Hospital) VITALS DATE

Data Format [date]

Definition

The date of the first recorded vitals in the ED/Hospital setting

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

Data Source

- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

(Initial ED/Hospital) VITALS TIME

Data Format [time]

Definition

The time of the first recorded vitals in the ED/Hospital setting

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

Data Source

- Triage Form/Trauma Flow Sheet
- Billing Sheet / Medical Records Coding Summary Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

TR 18.14

(Initial ED/Hospital) GCS – EYE *

Data Format [number]

Definition

First recorded Glasgow Coma Score (Eye) in the ED/hospital

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*GcsEye*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 4

Field Values

1 No eye movement when assessed
2 Opens eyes in response to painful stimulation
3 Opens eyes in response to verbal stimulation
4 Opens eyes spontaneously

Additional Information

- Used to calculate Overall GCS - ED Score
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED documentation

National Element

- National Element ED_10 from the 2012 National Trauma Data Standard

(Initial ED / Hospital) GCS – VERBAL *

Data Format [number]

Definition

First recorded Glasgow Coma Score (Verbal) in the ED/hospital

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*GcsVerbal*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 5

Field Values

Pediatric (≤ 2 years):

1	No vocal response	4	Cries but is consolable, inappropriate interactions
2	Inconsolable, agitated	5	Smiles, oriented to sounds, follows objects, interacts
3	Inconsistently consolable, moaning		

Adult:

1	No vocal response	3	Inappropriate words	5	Oriented
2	Incomprehensible sounds	4	Confused		

Additional Information

- Used to calculate Overall GCS - ED Score
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_11 from the 2012 National Trauma Data Standard

(Initial ED/Hospital) GCS – MOTOR *

Data Format [number]

Definition

First recorded Glasgow Coma Score (Motor) in the ED/hospital

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*GcsMotor*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 6

Field Values

Pediatric (≤ 2 years):

1 No motor response
2 Extension to pain
3 Flexion to pain
4 Withdrawal from pain
5 Localizing pain
6 Appropriate response to stimulation

Adult:

1 No motor response
2 Extension to pain
3 Flexion to pain
4 Withdrawal from pain
5 Localizing pain
6 Obeys commands

Additional Information

- Used to calculate Overall GCS - ED Score
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_12 from the 2012 National Trauma Data Standard

National Element

TR 18.21

(Initial ED/Hospital)GCS Assessment QUALIFIERS (UP TO 3)*

Data Format [combo] multiple-choice

Definition

Documentation of factors potentially affecting the first assessment of GCS upon arrival in the ED/hospital

Definition

Documentation of factors potentially affecting the first assessment of GCS upon arrival in the ED/hospital

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*GcsQualifier*
Multiple Entry Configuration	Yes, max 3	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1	Patient chemically sedated or paralyzed	3	Patient Intubated
2	Obstruction to the Patient's Eye	4	Valid GCS: Patient was not sedated, not intubated, and did not have obstruction to the eye

Additional Information

- Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e., ETOH, prescriptions, etc.)
- To select more than 1, hold down the Shift Key

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_14 from the 2012 National Trauma Data Standard

National Element

TR 18.30

(Initial ED/Hospital) TEMPERATURE*

Data Format [number]

Definition

First recorded temperature (in degrees Celsius [centigrade]) in the ED/hospital

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*Temperature*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 45°C

Field Values

- Relevant value for data element
- Used to auto-generate an additional calculated field: Temperature in degrees Fahrenheit

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_05 from the 2012 National Trauma Data Standard

National Element

TR 18.11

(Initial ED/Hospital) SYSTOLIC BLOOD PRESSURE*

Data Format [number]

Definition

First recorded systolic blood pressure in the ED/hospital

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *Sbp*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 299

Field Values

- Relevant value for data element

Additional Information

- Used to auto-generate an additional calculated field: Revised Trauma Score - ED (adult & pediatric)

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_03 from the 2012 National Trauma Data Standard

(Initial ED/Hospital) DIASTOLIC BLOOD PRESSURE

Data Format [number]

Definition

First recorded diastolic blood pressure in the ED/hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 299

Field Values

- Relevant value for data element

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

TR 18.2

(Initial ED/Hospital) PULSE RATE *

Data Format [number]

Definition

First recorded pulse in the ED/hospital (palpated or auscultated), expressed as a number per minute

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*PulseRate*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 300

Field Values

- Relevant value for data element

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_04 from the 2012 National Trauma Data Standard

National Element

TR 18.7

(Initial ED/Hospital) RESPIRATORY RATE *

Data Format [number]

Definition

First recorded respiratory rate in the ED/hospital (expressed as a number per minute)

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *RespiratoryRate*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 120

Field Values

- Relevant value for data element

Additional Information

If available, complete additional field: "Initial ED/Hospital Respiratory
- Assistance"
- Used to auto-generate an additional calculated field: Revised Trauma Score - ED (adult & pediatric)

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_06 from the 2012 National Trauma Data Standard

(Initial ED/Hospital) SP02 (Oxygen Saturation) *

Data Format [number]

Definition

First recorded oxygen saturation in the ED/hospital (expressed as a percentage)

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *PulseOximetry*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 100

Field Values

- Relevant value for data element

Additional Information

If available, complete additional field: "Initial ED/Hospital Supplemental
- Oxygen"

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_08 from the 2012 National Trauma Data Standard

National Element

TR 18.19

(Initial ED/Hospital) MANUAL GCS TOTAL *

Data Format [number]

Definition

First recorded Glasgow Coma Score (total) in the ED/hospital

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*TotalGcs*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 15

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Used to auto-generate an additional calculated field: Revised Trauma Score - ED (adult & pediatric)
- If a patient does not have a numeric GCS score recorded, but with documentation related to their level of consciousness such as "AAOx3", "awake alert and oriented", or "patient with normal mental status", interpret this as GCS of 15, IF there is no other contradicting documentation
- If a patient does not have a numeric GCS score recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of function within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus", a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

- National Element ED_13 from the 2012 National Trauma Data Standard

(Initial ED/hospital Revised Trauma Score) RTS (Total)

Data Format [number]

Definition

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the ED or hospital setting.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 4

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score
- Auto-generated if Manual GCS - Total is entered

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/hospital Pediatric Trauma Score) PTS (Total)

Data Format [number]

Definition

A physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the ED or hospital setting for a pediatric patient.

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: -6	**Max. Constraint:** 12

Field Values

- Relevant value for data element

Additional Information

- Use only if total score is available without component score

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

National Element

TR 18.109

(Initial ED/Hospital) SUPPLEMENTAL OXYGEN *

Data Format [combo] single-choice

Definition

Determination of the presence of supplemental oxygen during assessment of initial ED/hospital oxygen saturation level

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*SupplementalOxygen*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 No (No Supplemental Oxygen)
2 Yes (Supplemental Oxygen)

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED documentation

National Element

- National Element ED_09 from the 2012 National Trauma Data Standard

National Element

TR 18.10

(Initial ED/Hospital) RESPIRATORY ASSISTANCE *

Data Format [combo] single-choice

Definition

Determination of respiratory assistance associated with the Initial ED/hospital respiratory rate

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*RespiratoryAssistance*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 No (Unassisted Respiratory Rate)
2 Yes (Assisted Respiratory Rate)

Additional Information

- Only completed if a value is provided for "Initial ED/Hospital Respiratory Rate"
- Respiratory assistance is defined as mechanical and/or external support of respiration

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED documentation

National Element

- National Element ED_07 from the 2012 National Trauma Data Standard

(Initial ED/Hospital) AIRWAY MANAGEMENT

Data Format [combo] single-choice

Definition

Indication as to whether a device or procedure was performed to prevent or correct an obstructed respiratory passage while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Bag & Mask
- Combitube
- Cricoid
- LMA
- Nasal Cannula
- Non-rebreather mask
- Nasal ETT
- Oral Airway
- Oral ETT
- Trach
- Not Performed

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED / Hospital) CPR PERFORMED

Data Format [combo] single-choice

Definition

Indication as to if CPR management was conducted while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Performed

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

UNITS OF BLOOD

Data Format [number]

Definition

Indication as to if CPR management was conducted while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

1 Not Performed 2 Yes 3 No

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

BLOOD ORDERED DATE

Data Format [date]

Definition

Date and time the blood was ordered for the patient in the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as MM/DD/YYYY

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

CROSSMATCH DATE

Data Format [date]

Definition

Date and time the blood was crossmatched for the patient in the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as MM/DD/YYYY

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

BLOOD ADMINISTERED DATE

Data Format [date]

Definition

Date and time the blood was administered to the patient in the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as MM/DD/YYYY

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) CT HEAD (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) CT ABD/PELVIS (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) CT CHEST (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) CT CERVICAL (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) DATE SENT TO CT

Data Format [date]

Definition

The date the patient had a CT performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as MM/DD/YYYY

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) TIME SENT TO CT

Data Format [time]

Definition

The time the patient had a CT performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected in military time

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) ABDOMINAL ULTRASOUND DATE

Data Format [date]

Definition

The date and time abdominal ultrasound was performed on the patient while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Collected as MM/DD/YYYY

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation

(Initial ED/Hospital) ABDOMINAL ULTRASOUND (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Not Performed
- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) ARTERIOGRAM (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

(Initial ED/Hospital) AORTOGRAM (Results)

Data Format [combo] single-choice

Definition

Indication as to if the procedure was performed while under the care of the ED/Hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Positive
- Negative

Additional Information

- "Positive" is defined as 'any traumatic injury'
- "Negative" is defined as 'no traumatic injury'

Data Source

- Triage Form / Trauma Flow Sheet
- Other ED Documentation
- Radiology Report

ALCOHOL USE INDICATOR *

Data Format [combo] single-choice

Definition

Use of alcohol by the patient

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AlcoholUseIndicators*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 No (Not Tested)
2 No (confirmed by test)
3 Yes (confirmed by test [trace levels])
4 Yes (confirmed by test [beyond legal limit])

Additional Information

- Blood alcohol concentration (BAC) may be documented at any facility (or setting) treating this patient event
- If positive, indicate Blood Alcohol Content value
- "Trace levels" is defined as any alcohol level below the legal limit, but not zero
- "Beyond legal limit" is defined as a blood alcohol concentration above the legal limit for the state in which the treating institution is located. Above any legal limit, DUI, DWI, or DWAI, would apply here
- If alcohol use is suspected, but not confirmed by test, record null value "Not Known/Not Recorded"

Data Source

- Lab results (facility specific ; inter-facility data not valid)

National Element

- National Element ED_15 from the 2012 National Trauma Data Standard

BLOOD ALCOHOL CONTENT (BAC)

Data Format [number]

Definition

Indicates the measure of ethyl alcohol in a blood sample obtained from the patient for laboratory examination (reported in mg/dl)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Blood alcohol concentration (BAC) may be documented at any facility (or setting) treating this patient event
- Only completed when "Alcohol Use Indicator" is selected as "Yes"

Data Source

- Lab results (facility specific ; inter-facility data not valid)

(Initial ED / Hospital) BASE DEFICIT

Data Format [number]

Definition

The first recorded base deficit (the arterial blood gas component showing the degree of acid/base imbalance), measured in mEq/L

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Lab results (facility specific ; inter-facility data not valid)

National Element

TR 18.45

DRUG USE INDICATOR *

Data Format [combo] multiple-choice

Definition

Use of drugs by the patient

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*DrugUseIndicator*
Multiple Entry Configuration	Yes, max 2	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 No (not tested)
2 No (confirmed by test)
3 Yes (confirmed by test [rX drug])
4 Yes (confirmed by test [illegal use drug])

Additional Information

- Drug use may be documented at any facility (setting) treating this patient event
- If positive, indicate classification or drug specific information
- "Illegal use drug" includes illegal use of prescription drugs
- If drug use is suspected, but not confirmed by test, record null value "Not Known / Not Recorded"
- This data element refers to drug use by the patient and does not include medical treatment

Data Source

- Lab results (facility specific ; inter-facility data not valid)
- ED Physician Documentation

National Element

- National Element ED_16 from the 2012 National Trauma Data Standard

DRUG (Involvement Toxic) SCREEN

Data Format [combo] multiple-choice

Definition

Laboratory test used to detect the presence of drugs in the patient's blood. Enter the drugs present when drug screening was performed in ED. You may enter more than one drug. Do not include drugs given to the patient during any phase of resuscitation

Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values

Field Values

- Amphetamine
- Antidepressants (including Tricyclics)
- Barbiturate
- Benzodiazepines (Valium)
- Cocaine
- Ethanol
- Marijuana (cannabis)
- Methamphetamines
- Opiates (including Propoxyphene)
- PCP

Additional Information

- Drug use may be documented at any facility (setting) treating this patient event
- Only completed when "Drug Use Indicator" is selected as "Yes"

Data Source

- Lab results (facility specific ; inter-facility data not valid)
- ED Physician Documentation

Diagnosis Information

ICD-9 CODE (Injury Diagnosis) *

Data Format [combo] multiple-choice

Definition

Diagnoses related to all identified injuries

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*InjuryDiagnosis*
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Injury diagnoses as defined by (ICD-9-CM) codes
- The maximum number of diagnoses that may be reported for an individual patient is 50

Additional Information

- Used to auto-generate eight additional calculated fields: Abbreviated Injury Scale (six body regions), Injury Severity Score, and the Functional Capacity Index
- At least one diagnosis must be provided and meet inclusion criteria (800-959.9, 994.1, 994.7, except for 905-909.9, 910-924.9, 930-939.9)

Data Source

- Hospital Discharge Summary
- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

National Element

- National Element DG_02 from the 2012 National Trauma Data Standard

AIS 05 (Predot) CODE *

Data Format [combo] multiple-choice

Definition

The Abbreviated Injury Scale (AIS) predot codes that reflect the patient's injuries

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AisPredot*
Multiple Entry Configuration	Yes, max 50	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- The predot code is the 6 digits preceding the decimal point in an associated AIS code

Additional Information

- This variable is considered *optional* and is not required as part of the State dataset

Data Source

- Hospital Discharge Summary
- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

National Element

- National Element IS_01 from the 2012 National Trauma Data Standard

Optional National Element

AIS VERSION *

Data Format [text]

Definition

The software (and version) used to calculate Abbreviated Injury Scale (AIS) severity codes

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*AisVersion*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Auto-calculated once AIS code is typed in

Additional Information

- This variable is considered *optional* and is not required as part of the State dataset

National Element

- National Element IS_04 from the 2012 National Trauma Data Standard

Optional National Element

ISS (Body) REGION *

Data Format [number]

Definition

The Injury Severity Score (ISS) body region codes that reflects the patient's injuries

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*IssRegion*
Multiple Entry Configuration	Yes, max 50	**Accepts Null Value**	Yes, common null values
Required in XSD Yes		**Min. Constraint:** 1	**Max. Constraint:** 6

Field Values

1 Head or Neck
2 Face
3 Chest
4 Abdominal or pelvic contents
5 Extermities or pelvic girdle
6 External

Additional Information

- Auto-calculated once AIS code is typed in
- This variable is considered *optional* and is not required as part of the State dataset

Data Source

- Hospital Discharge Summary
- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

National Element

- National Element IS_03 from the 2012 National Trauma Data Standard

Optional National Element

AIS BASED INJURY SEVERITY SCORES BY DIAGNOSIS *

Data Format [number]

Definition

The Abbreviated Injury Scale (AIS) severity codes that reflect the patient's injuries

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*AisSeverity*
Multiple Entry Configuration	Yes, max 50	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 6

Field Values

- Auto-calculated once AIS code is typed in

Additional Information

- This variable is considered *optional* and is not required as part of the State dataset

National Element

- National Element IS_02 from the 2012 National Trauma Data Standard

Optional National Element

MANUAL (Locally Calculated ISS) *

Data Format [number]

Definition

The Injury Severity Score (ISS) that reflects the patient's injuries

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)**	*IssLocal*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1	**Max. Constraint:** 75

Field Values

1 Minor Injury
2 Moderate Injury
3 Serious Injury
4 Severe Injury
5 Critical Injury
6 Maximum Injury, Virtually Insurvivable
9 Not Possible to Assign

Additional Information

- This variable is considered *optional* and is not required as part of the State dataset

National Element

- National Element IS_05 from the 2012 National Trauma Data Standard

Comorbidity Information

CO-MORBID CONDITIONS *

Data Format [combo] multiple-choice

Definition

Pre-existing co-morbid factors present before patient arrival at the ED/Hospital

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*ComorbidCondition*
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1	NO NTDS co-morbidities present
2	Alcoholism
3	Ascites within 30 days
4	Bleeding disorder
5	Currently receiving chemotherapy for cancer
6	Congenital Anomalies
7	Congestive Heart Failure
8	Current smoker
9	Chronic renal failure
10	CVA/residual neurological deficit
11	Diabetes mellitus
12	Disseminated cancer
13	Advanced directive limiting care
14	Esophageal varices
15	Functionally dependent health status
16	History of angina within past 1 month
17	Hist. of myocardial infarction (past 6 mo)
18	History of PVD
19	Hypertension requiring medication
21	Prematurity
22	Obesity
23	Respiratory Disease
24	Steroid Use
25	Cirrhosis
26	Dementia
27	Major psychiatric illness
28	Drug Abuse
29	Other

Additional Information

- The value "Not Applicable" should be used for patients with no known co-morbid conditions

Data Source

- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

National Element

- National Element DG_01 from the 2012 National Trauma Data Standard

CO-MORBID CONDITION NOTES

Data Format [text]

Definition

Additional information about the pre-existing medical conditions

Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
		Min Constraint: 0	**Max Constraint:** 2000

Field Values

- Relevant value for data element

Data Source

- History and Physical
- Physician's Documentation
- Nurses' Notes
- Other Hospital Documentation

Procedures Information

PROCEDURE PERFORMED

Data Format [combo] single-choice

Definition

Indicates whether there are ICD-9 codes for procedures to report or not

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- No
- Yes

Data Source

- Operative Reports
- Triage Form / Trauma Flow Sheet
- Nurses' Documentation
- Physician Documentation
- Anesthesia Record
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Discharge Summary

Additional Information

- Code the field as Not Applicable if patient did not have procedures

National Element

TR 22.1

ICD-9 CODE (Hospital Procedures) *

Data Format [combo] multiple-choice

Definition

Operative and essential procedures conducted during hospital stay. Operative and essential procedures are those that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or complications.

The list of procedures below should be used as a guide to non operative procedures that should be provided to the state. Not all hospitals capture all procedures listed below. Please transmit those procedures that you capture to the state.

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*HospitalProcedures*
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Major and minor procedure (ICD-9-CM) IP codes

Additional Information

- Include only procedures performed at your institution
- Capture all procedures performed in the operating room
- Capture all procedures in the ED, ICU, ward, or radiology department that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or their complications
- Procedures with an asterisk have the potential to be performed multiple times during one episode of hospitalization. In this case, capture only the first event. If there is no asterisk, capture each event even if there is more than one.
- Note that the hospital may capture additional procedures
- If patient is considered a candidate for organ procurement, subsequent hospitalization data does not apply and procurement procedures should not be abstracted

Data Source

- Operative Reports
- Triage Form / Trauma Flow Sheet
- Nurses' Documentation

- Physician Documentation
- Anesthesia Record
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Discharge Summary

National Element

- National Element HP_01 from the 2012 National Trauma Data Standard

Diagnostic & Therapeutic Imaging

Computerized tomographic studies *
Diagnostic ultrasound (includes FAST) *
Doppler ultrasound of extremities*
Angiography
Angioembolization
Echocardiography
Cystogram
IVC filter
Urethrogram

Cardiovascular

Central venous catheter *
Pulmonary artery catheter *
Cardiac output monitoring *
Open cardiac massage
CPR

CNS

Insertion of ICP monitor *
Ventriculostomy *
Cerebral oxygen monitoring *

Musculoskeletal

Soft tissue / bony debridements *
Closed reduction of fractures
Skeletal and halo traction
Fasciotomy

Genitourinary

Ureteric catheterization (i.e. Ureteric stent)
Suprapubic cystostomy

Transfusion

The following blood products should be captures over first 24 hours after hospital arrival:
Transfusion of red cells *
Transfusion of platelets *
Transfusion of plasma *
In addition to coding the individual blood products listed above assign the 99.01 ICD-9 procedure code on patients that receive > 10 units of blood products over first 24 hours following hospital arrival *

Respiratory

Insertion of endotracheal tube *
Continuous mechanical ventilation *
Chest tube *
Bronchoscopy *
Tracheostomy

Gastrointestinal

Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)
Gastrostomy / jejunostomy (percutaneous or endoscopic)
Percutaneous (endoscopic) gastrojejunoscopy

Other

Hyperbaric oxygen
Decompression chamber
TPN *

(Procedure Performed) LOCATION

Data Format [combo] single-choice

Definition

The hospital location where the procedure was performed

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Catherization Lab
- ED
- Floor
- GI Lab
- ICU
- OR
- Prehospital
- PTA (Referring Hospital)
- Radiology
- Readmit OR (planned OR)
- Special Procedures Unit
- Tele

Data Source

- Operative Reports
- Triage Form / Trauma Flow Sheet
- Nurses' Documentation
- Physician Documentation
- Anesthesia Record
- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Discharge Summary

National Element

(Hospital Procedure) DATE STARTED *

Data Format [date]

Definition

The date operative and essential procedures were performed

XSD Data Type	*xs: date*	**XSD Element / Domain (Simple Type)** *HospitalProcedureStartDate*	
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1990	**Max. Constraint:** 2030

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

National Element

- National Element HP_02 from the 2012 National Trauma Data Standard

National Element

TR 22.31

(Hospital Procedure Start) TIME *

Data Format [time]

Definition

The time operative and essential procedures were performed

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*HospitalProcedureStartTime*
Multiple Entry Configuration	Yes	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Procedure start time is defined as the time the incision was made (or the procedure started)

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

National Element

- National Element HP_03 from the 2012 National Trauma Data Standard

(Physician Performing the Procedure) STAFF

Data Format [combo] single-choice

Definition

Physician performing the procedure

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

SERVICE TYPE (of the Physician)

Data Format [combo] single-choice

Definition

Service type of the physician

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Critical Care Medicine
- Emergency Medicine
- Ear Nose Throat
- Gastroenterology
- Gynecology
- General Surgery
- Hand Surgery
- Medicine
- Neurosurgery
- Obstetrics
- Oral Maxillo Facial Surgery
- Ophthalmology
- Orthopedic Surgery
- Pediatric Surgery
- Pediatric Orthopedic
- Plastic Surgery
- Radiology
- Trauma Surgery
- Thoracic Surgery
- Urology
- Vascular Surgery

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

RESOURCE UTILIZATION

Data Format [combo] single-choice

Definition

A list of resources utilized during the treatment and care of the patient

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Adult Protective Service
- Bi-Pap
- Case Management
- Cerebral Brain Flow Studies
- Child Protective Service
- CRRT
- Dialysis
- Epidural Catheter
- Exceeds LOS
- Factor VIIa (Novoseven)
- High dose methylprednisolone
- Hypertonic Saline
- Level-1 Blood/Fluid Warmer
- LiCox Monitor
- Massive Blood Transfusion
- Miama J Collar
- MRI
- None
- Occupational Therapy
- Pentobarbital Coma
- Peripheral Parenteral Nutrition (PPN)
- Physical Therapy
- PICC line
- PRISMA (CVVHD)
- Respiratory Therapy
- RN accompanied transfer
- Specialized Bed
- Speech Therapy
- TLSO Brace
- Total Parenteral Nutrition (TPN)
- Traction
- Transfusion of FFP
- Transfusion of Platelets
- Transfusion of PRBC
- Tube Feeding
- Uncrossmatched Blood
- Vaccine Post-Splenectomy
- Venous Doppler
- Wound Care RN
- Wound Vacuum

Data Source

- OR Nurses' Notes
- Operative Reports
- Anesthesia Record

Complications / Performance Improvement Information

National Element

(Hospital) COMPLICATIONS *

Data Format [combo] single-choice

Definition

Any medical complication that occurred during the patient's stay at your hospital

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*HospitalComplications*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Cardiovascular
- Gastrointestinal
- Hematologic
- Hepatic, Pancreatic, Biliary, Splenic
- Hospital Airway
- Infection (Nonpulmonary, Nonorthopedic)
- Miscellaneous
- Musculoskeletal / Integumentary
- Neurologic
- No Complications
- Prehospital Airway
- Prehospital Fluids
- Prehospital Miscellaneous
- Provider Errors/Delays
- Psychiatric
- Pulmonary
- Renal/Genitourinary
- Vascular

Additional Information

- The value "N/A" should be used for patients with no complications

National Element

- National Element Q_01 from the 2012 National Trauma Data Standard

National Element

TR23.1

(Hospital) COMPLICATIONS (Sub Categories) *

Data Format [combo] single-choice

Definition

Any medical complication that occurred during the patient's stay at your hospital

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*HospitalComplication*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

Cardiovascular

- Base Deficit
- Bleeding

8 Cardiac Arrest with CPR

18 Myocardial infarction

Gastrointestinal

- Abdominal Compartment Syndrome
- Abdominal Fascia
- Wound Disruption

Hematologic

- Coagulopathy

Hepatic, Pancreatic, Biliary, Splenic

- Splenic Injury (Iatrogenic)
- Pancreatitis
- Pancreatic Fistula
- Other Hepatic / Biliary
- Liver Failure
- Jaundice
- Hepatitis
- Acalculous Cholesystitis

Hospital Airway

25 Unplanned Intubation

Miscellaneous

30 Unplanned return to the OR

31 Unplanned return to the ICU

Musculoskeletal/Integumentary

11 Decubitus Ulcer

15 Extremity compartment syndrome

Neurologic

- Coma

13 Drug or alcohol withdrawal syndrome

- Intracranial pressure

22 Stroke / CVA

Prehospital Airway

- Unable to intubate
- Mainstem Intubation
- Extubation, Unintentional
- Esophageal Intubation
- Aspiration

Pulmonary

5 Acute respiratory distress syndrome (ARDS)

20 Pneumonia

21 Pulmonary embolism

Infection (Nonpulmonary, nonorthopedic)

32 Severe Sepsis

- Catheter - Related Blood Stream Infection

12 Deep surgical site infection

19 Organ/space surgical site infection

23 Superficial surgical site infection

- Systemic Sepsis

Prehospital Fluids

- *Unable to start IV*
- *Inappropriate Fluid Management*

Prehospital Miscellaneous

- *Other prehospital fluid*

Renal / Genitourinary

1 Acute kidney failure

Vascular

14 Deep Vein Thrombosis (DVT) / thrombophlebitis

16 Graft/prosthesis/flap failure

Additional Information

- *A number indicates complications recognized by the NTDB*

National Element

- *National Element Q_01 from the 2012 National Trauma Data Standard*

(Complication) STATUS

Data Format [radio]

Definition

The status of the complication

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Open
- Close

(Complication) OCCURRENCE DATE

Data Format [date]

Definition

The date that the complication was first documented

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

(Complication) PR DATE

Data Format [date]

Definition

Complications peer review date

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

(Complication) CORRECTIVE ACTION

Data Format [combo] single-choice

Definition

The action taken based on the complication

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Counseling
- Education
- Guideline / Protocol
- Other
- Peer Review Presentation
- Privilege/Credentiating
- Process Improvement Team
- Resource Enhancement
- Trend
- Unnecessary

(Complication) OTHER CORRECTIVE ACTION

Data Format [text]

Definition

Any other action taken based on the complication

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Corrective Action is "Other"

(Complication) DETERMINATION

Data Format [combo] single-choice

Definition

Indication as to what was determined to be the cause of the complication

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Cannot be Determined
- Disease-Related
- Provider-Related
- System-Related

FURTHER EXPLAINATION / ACTION (of Complication)

Data Format [text]

Definition

Further explanation of the complication

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 2000

Field Values

- Relevant value for data element

PREVENTABILITY (of Complication)

Data Format [combo] single-choice

Definition

Is the complication preventable?

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Cannot Be Determined
- Nonpreventable
- Potentially Preventable
- Preventable

JUDGMENT (of Complication)

Data Format [combo] single-choice

Definition

Outcome of peer review of a complication

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Acceptable
- Acceptable with Reservations
- Defer Peer Review
- Not Available
- Not Recorded
- Unacceptable
- Will Never Undergo PR

PERFORMANCE IMPROVEMENT AUDITS

Data Format [combo] single-choice

Definition

The performance improvement audit

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Delay in Assessment, Diagnosis, Technique, Disposition, or Treatment (ACS993)
- Hospital Specific PI
- No FAST exam performed
- < = 8 GCS and no definitive airway established
- 2 hours at initial hospital before transfer (State)
- Abdominal, Thoracic, Vascular, or Cranial Surgery After 24 hours (ACSAF8)
- Absent hourly charting (ACSFA2)
- ACS 1993 Resources book pp.79-80: audit filters
- ACS 1999 Resources book p. 71: process/outcome measures
- Admit by Nonsurgeon (ACSAF9)
- Airway Complication
- Ambulance Scene Time > 20 minutes (ACSFA1)
- Appropriateness of Prehospital and ED Triage (ACS992)
- Appropriateness , Completeness, and Legibility of Documentation (ACS995)
- Availability of Family Services (ACS9911)
- Carbon Monoxide Poisoning
- Cardiac / Respiratory Arrest After Admission
- Cardiac / Respiratory Arrest Prior Admission
- Compliance with Guidelines, Protocols, and Pathways (ACS991)
- Consistency of Outpatient Follow-up (ACS9913)
- Craniotomy After 4 Hrs., with Epidural or Subdural, Excluding ICP Monitoring (ACSAF6)
- Deaths (Hospitals)
- Deaths (Pre-Hospitals)
- Delay to OR or Availability of OR - Acute or Subacute (ACS998)
- Door to backboard removal > 30 minutes
- ER Temperature not recorded for patients < 12 years of age
- ER Temperature not recorded for patients < 12 years of age (State)
- Error in Judgment, Communication, Diagnosis, Technique, or Treatment (ACS994)
- GCS 1 hour after admission
- Glasgow Coma Score (GCS) < 14, No Head CT (ACSAF2)
- GCS < =8, no Endotracheal Tube or Surgical Airway (State & ACSAF3)

- GCS not present
- GCS not present (Prehospital) (State)
- Inadvertent Extubation
- Inhalation Injury
- Initial rX > 8 Hrs of Open Tibia Fx, Exc. Low Velocity Gunshot Wound (ACSAF7)
- Insurance Carrier Denials (ACS9912)
- Intubated and end tidal CO2 not documented
- Laparotomy after 4 Hours (ACSAF5B)
- Missing EMS Report (State & ACSAF1)
- NARSIS or EMS Form/Run Select/Electronic Report Not Available
- No Laparotomy <=1 Hour, Abdominal Injuries, and Systolic BP < 90 (ACSAF5A)
- No Performance Improvement Issues
- Nonfixation of Femoral Diaphyseal Fracture in Adult (ACSAF10)
- Nonoperative rX of Gunshot Wound to the Abdomen (ACSAF4)
- Not Available
- Pain assessment not recorded hourly
- Pain level persistently > 5
- Pain not re-assessed after analgesic administration
- Patient Satisfaction (ACS9914)
- Peripheral Nerve Injury During Injury or Care
- Physician or Physician extender response > 30 min in basic or general Trauma Center
- Physician or Physician extender resp>30 min in basic or gen Trauma Center(State)
- Physician or Physician extender resp>15 min in adv or comp Trauma Center(State)
- Professional Behavior (ACS9910)
- Reintubation within 48 hours of Extubation (ACSFA4)
- Response Time > 30 minutes (dispatch to arrival on scene)
- Response time > 30 minutes (dispatch to arrival on scene) (Prehospital) (state)
- Skin Graft Loss Requiring Regrafting
- Timeliness and availability of X-Ray Reports (ACS996)
- Timeliness of Rehabilitation (ACS999)
- Timely Participation of Subspecialists (Delay in Trauma Activation, Obtaining Consultation, or MD Response) (ACS997)
- Transfer after 6 hours in the initial hospital (ACSFA3)
- Transfer out after >45 minutes
- Transferred and did not meet transfer criteria
- Trauma Death (Hospital or Prehospital) (State & ACSAF12)
- Undefined Quality Indicator from Ver. 2.0 (ACS999)
- Vital signs not recorded
- Vital signs not recorded (Prehospital) (state)
- Volume of infused fluids not documented

Data Source

- Site Specific

TR 31.9

(Performance Improvement) STATUS

Data Format [radio]

Definition

The status of QA peer review judgement

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Open
- Close

(PI) OCCURRENCE DATE

Data Format [date]

Definition

The date that the performance improvement occurred

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

(PI) PR DATE

Data Format [date]

Definition

The QA indicator peer review date

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY

(PI) CORRECTIVE ACTION

Data Format [combo] single-choice

Definition

The action taken based on the quality indicator

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Counseling
- Education
- Guideline / Protocol
- Other
- Peer Review Presentation
- Privilege/Credentiating
- Process Improvement Team
- Resource Enhancement
- Trend
- Unnecessary

(PI) OTHER CORRECTIVE ACTION

Data Format [text]

Definition

Any other action taken to correct the PI

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Corrective Action is "Other"

DETERMINATION (of PI)

Data Format [combo] single-choice

Definition

Indication as to what was determined to cause the need for a performance improvement audit

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Cannot be Determined
- Disease-Related
- Provider-Related
- System-Related

FURTHER EXPLANATION / ACTION (of PI)

Data Format [text]

Definition

Further explanation of the PI

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
		Min. Constraint: 0	**Max. Constraint:** 2000

Field Values

- Relevant value for data element

(PI) PREVENTABILITY

Data Format [combo] single-choice

Definition

Is the PI preventable?

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Cannot Be Determined
- Nonpreventable
- Potentially Preventable
- Preventable

(PI) JUDGMENT

Data Format [combo] single-choice

Definition

Peer review judgment of a QA indicator

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Acceptable
- Acceptable with Reservations
- Defer Peer Review
- Not Available
- Not Recorded
- Unacceptable
- Will Never Undergo PR

Outcome Information

HOSPITAL DISCHARGE SERVICE

Data Format [combo] single-choice

Definition

The department that discharged the patient from the hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Critical Care Medicine
- Gynecology
- Neurosurgery
- Orthopedic Surgery
- Acute Rehabilitation Medicine
- Vascular Surgery
- Gastroenterology
- Bariatric
- Ophthalmology
- Plastic Surgery
- Urology
- Dermatology
- Geriatric
- Infectious Disease
- Kidney Transplant
- Neonatal
- Neurology
- Pediatric Cardiology
- Pediatric Dentistry
- Pediatric Hematology Oncology
- Pediatric Nephrology
- Pediatric Pulmonary
- Liver
- Nephrology
- Pediatric Critical Care Medicine
- Pediatric Infectious Disease
- Pediatric Nephrology
- Rheumatology
- Ear Nose Throat
- Hand
- Oral Maxillo Facial Surgery
- Pediatric Orthopedic
- Cardiology
- Chemical Dependency
- General Surgery
- Obstetrics
- Critical Care Surgery
- Trauma Surgeon
- Psychiatry
- Pulmonary
- Anesthesia
- Burn
- Cardiothoracic Surgery
- Dentistry
- Endocrinology
- Family Medicine
- Gynecology
- Hematology Oncology
- Internal Medicine
- Occuloplastic
- Pain
- Pediatric Gastroenterology
- Pediatric Neurology
- Psychology

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

HOSPITAL ADMISSION DATE

Data Format [date]

Definition

Date patient was discharged from the ED (or arrived at the facility if the patient was a direct admit)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Used to auto-generate an additional calculated field: Total Length of Hospital Stay (time from hospital admission to hospital discharge)

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

HOSPITAL ADMISSION TIME

Data Format [time]

Definition

Time patient was discharged from the ED (or arrived at the facility if the patient was a direct admit)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Used to auto-generate an additional calculated field: Total Length of Hospital Stay (time from hospital admission to hospital discharge)

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

National Element

TR 25.34

HOSPITAL DISCHARGE DATE *

Data Format [date]

Definition

The date the patient was discharged from the hospital

XSD Data Type *xs: date*		**XSD Element / Domain (Simple Type)** *HospitalDischargeDate*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 1990	**Max. Constraint:** 2030

Field Values

- Relevant value for data element

Additional Information

- Collected as MM/DD/YYYY
- Used to auto-generate an additional calculated field: Total Length of Hospital Stay (time from hospital admission to hospital discharge)
- If ED Discharge Disposition is "Died", then Hospital Discharge Disposition should be NA
- If ED Discharge Disposition is "Home with Services", "Other (jail, institutional care, mental health, etc.)", "Home without services", "Left against medical advice", or "Transferred to another hospital" then Hospital Discharge Disposition must be NA
- Patient date/time of death consists of clinical documentation. If patient is considered a candidate for organ procurement, subsequent hospitalization date does not apply and procurement data should not be abstracted

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

National Element

- National Element O_03 from the 2012 National Trauma Data Standard

National Element

TR 25.48

HOSPITAL DISCHARGE TIME *

Data Format [time]

Definition

The time the patient was discharged from the hospital

XSD Data Type	*xs: time*	**XSD Element / Domain (Simple Type)**	*HospitalDischargeTime*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Relevant value for data element

Additional Information

- Collected as HHMM
- HHMM should be collected as military time
- Used to auto-generate an additional calculated field: Total Length of Hospital Stay (time from hospital admission to hospital discharge)
- If ED Discharge Disposition is "Died", then Hospital Discharge Disposition should be NA
- If ED Discharge Disposition is "Home with Services", "Other (jail, institutional care, mental health, etc.)", "Home without services", "Left against medical advice", or "Transferred to another hospital" then Hospital Discharge Disposition must be NA
- Patient date/time of death consists of clinical documentation. If patient is considered a candidate for organ procurement, subsequent hospitalization date does not apply and procurement data should not be abstracted

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

National Element

- National Element O_04 from the 2012 National Trauma Data Standard

National Element

TR 26.9

TOTAL ICU DAYS *

Data Format [number]

Definition

The total number of patient days in any ICU (including all episodes)

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *TotalICuLos*	
Multiple Entry Configuration No		**Accepts Null Value** Yes, common null values	
Required in XSD Yes		**Min. Constraint:** 0	**Max. Constraint:** 400

Field Values

- Relevant value for data element

Additional Information

- Recorded in full day increments with any partial day listed as a full day

Data Source

- ICU Nursing Flow Sheet
- Calculate Based on Admission Form and Discharge Sheet
- Nursing Progress Notes

National Element

- National Element O_01 from the 2012 National Trauma Data Standard

National Element

TR 26.58

TOTAL VENTILATOR DAYS *

Data Format [number]

Definition

The total number of patient days spent on a mechanical ventilator (excluding time in the OR)

XSD Data Type *xs: integer*		**XSD Element / Domain (Simple Type)** *TotalVentDays*	
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes	**Min. Constraint:** 0	**Max. Constraint:** 400

Field Values

- Relevant value for data element

Additional Information

- Recorded in full day increments with any partial day listed as a full day
- Excludes mechanical ventilation time associated with OR procedures
- Non-invasive means of ventilator support (CPAP or BIPAP) should not be considered in the calculation of ventilator hours

Data Source

- ICU Respiratory Therapy Flow Sheet
- ICU Nursing Flow Sheet
- Physician's Daily Progress Notes
- Calculate Based on Admission Form and Discharge Sheet
- Nursing Progress Notes

National Element

- National Element O_02 from the 2012 National Trauma Data Standard

National Element

TR 2.5

PRIMARY METHOD OF PAYMENT *

Data Format [combo] single-choice

Definition

Primary source of payment for hospital care

XSD Data Type	*xs: string*	**XSD Element / Domain (Simple Type)**	*PrimaryMethodPayment*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Medicaid
2 Not Billed (for any reason)
3 Self Pay
4 Private / Commercial Insurance
5 (No Fault) Automobile
6 Medicare
7 Other Government
8 Workers Compensation
9 HMO IL
10 Other

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

National Element

- National Element F_01 from the 2012 National Trauma Data Standard

OTHER BILLING SOURCE

Data Format [text]

Definition

Other billing source that is not specific in the Primary Method of Payment drop-down menu

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Primary Method of Payment is "Other"

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form
- Face Sheet

SECONDARY METHOD OF PAYMENT

Data Format [combo] single-choice

Definition

Any known secondary source of finance expected to assist in payment of medical bills

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Medicare Supp
- Managed Care
- No Fault Automobile
- Not Billed (for any reason)
- Medicare
- Medicaid
- Private / Commercial Insurance
- Workers Compensation
- Other
- Self Pay
- Other Government

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form
- Face Sheet

SECONDARY OTHER BILLING SOURCE

Data Format [text]

Definition

Secondary other billing source that is not specific in the Secondary Method of Payment drop-down menu

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Secondary Method of Payment is "Other"

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form
- Face Sheet

National Element

TR 2.10

WORK-RELATED *

Data Format [combo] single-choice

Definition

Indication of whether the injury occurred during paid employment

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*WorkRelated*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Yes

2 No

Additional Information

- If work related, two additional data fields must be completed: Patient's Occupational Industry and Patient's Occupation

Data Source

- EMS Run Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_03 from the 2012 National Trauma Data Standard

National Element

PATIENT'S OCCUPATIONAL INDUSTRY *

Data Format [combo] single-choice

Definition

The occupational industry associated with the patient's work environment

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	
Multiple Entry Configuration	No	*PatientsOccupationalIndustry*	
Required in XSD	Yes	**Accepts Null Value**	Yes, common null values

Field Values

1 Finance, Insurance, and Real Estate
2 Manufacturing
3 Retail Trade
4 Transportation and Public Utilities
5 Agriculture, Forestry, Fishing
6 Professional and Business Services
7 Education and Health Services
8 Construction
9 Government
10 Natural Resources and Mining
11 Information Services
12 Wholesale Trade
13 Leisure and Hospitality
14 Other Services

Additional Information

- Only completed if injury is work-related
- If work related, also complete Patient's Occupation
- Based upon US Bureau of Labor Statistics Industry Classification

Data Source

- EMS Run Sheet
- Triage Form / Trauma Flow Sheet
- ED Nurses' Notes
- Other ED Documentation

National Element

- National Element I_04 from the 2012 National Trauma Data Standard

PATIENT'S OCCUPATION *

Data Format [combo] single-choice

Definition

The occupation of the patient

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*PatientsOccupation*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

1 Business and Financial Operations Ocp
2 Architecture and Engineering Ocp
3 Community and Social Services Ocp
4 Education, Training, and Library Ocp
5 Healthcare Practitioners and Technical Ocp
6 Protective Service Ocp
7 Building and Grounds Cleaning and Maintenance
8 Sales and Related Ocp
9 Farming, Fishing, and Forestry Ocp
10 Installation, Maintenance, and Repair Ocp
11 Transportation and Material Moving Ocp
12 Management Ocp
13 Computer and Mathematical Ocp
14 Life, Physical, and Social Science Ocp
15 Legal Ocp
16 Arts, Design, Entertainment, Sports, and Media
17 Healthcare Support Ocp
18 Food Prep & Serving Related
19 Personal Care & Service Ocp
20 Office & Admin Support Ocp
21 Construction and Extraction Ocp
22 Production Ocp
23 Military Specific Ocp

Additional Information

- Only completed if injury is work-related
- If work related, also complete Patient's Occupational Industry
- Based upon 1999 US Bureau of Labor Statistics Standard Occupational Classification (SOC)

Data Source

1 EMS Run Sheet
2 Triage Form / Trauma Flow Sheet
3 ED Nurses' Notes
4 Other ED documentation

National Element

- National Element I_05 from the 2012 National Trauma Data Standard

BILLED HOSPITAL CHARGES

Data Format [number]

Definition

The total amount the hospital charged for the patient's care

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

REIMBURSED CHARGES

Data Format [number]

Definition

The amount the hospital was reimbursed for services

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

DISABILITY AT DISCHARGE - FEEDING

Data Format [combo] single-choice

Definition

A score calculated to derive a baseline of trauma patient feeding disability at discharge from an acute care facility

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*SelfFeeding*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

1	Dependent - Total Help	2	Dependent - Partial Help
3	Independent with Device	4	Independent

Additional Information

- Used to auto-generate an additional calculated field: FIM Score (combination of Feeding, Locomotion, and Motor scores)
- Assess as close to discharge as possible. Includes using suitable utensils to bring food to mouth, chewing, and swallowing (once meal is appropriately prepared). Opening containers, cutting meat, buttering bread and pouring liquids are not included as they are often part of meal preparation.
- Dependent-total help required: Either performs less than half of feeding tasks, or does not eat or drink full meals by mouth and relies at least in part on other means of alimentation, such as parenteral or gastrostomy feedings.
- Dependent-partial help required: Performs half or more of feeding tasks but requires supervision (e.g., standby, cueing, or coaxing) setup (application of Orthopedics), or other help.
- Independent with device: Uses an adaptive or assisting device such as a straw, spork, or rocking knifes, or requires more than a reasonable time to eat.
- Independent: Eats from a dish and drinks from a cup or glass presented in the customary manner on table or tray. Uses ordinary knife, fork, and spoon.
- Not applicable: (e.g., patient less than 7 years old, patient died, etc.)

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

DISABILITY AT DISCHARGE - LOCOMOTION

Data Format [combo] single-choice

Definition

A score calculated to derive a baseline of trauma patient locomotion (independence) disability at discharge from an acute care facility

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*Locomotion*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

1	Dependent - Total Help	2	Dependent - Partial Help
3	Independent with Device	4	Independent

Additional Information

- Used to auto-generate an additional calculated field: FIM Score (combination of Feeding, Locomotion, and Motor scores)
- Includes walking once in a standing position, or using a wheelchair, once in a seated position, indoors
- Dependent - total help required: Performs less than half of locomotion effort to go a minimum of 50 feet, or does not walk or wheel a minimum of 50 feet. Requires assistance of one or more persons.
- Dependent - partial help required: If walking, requires standby supervision, cueing, or coaxing to go a minimum of 150 feet, or walks independently only short distances (a minimum of 50 feet). If not walking, requires standby supervision, cueing, or coaxing to go a minimum of 150 feet in wheelchair, or operates manual or electric wheelchair independently only short distances (a minimum of 50 feet).
- Independent with Device: Walks a minimum of 150 feet but uses a brace or prosthesis on leg, special adaptive shoes, cane, crutches, or walker; takes more than a reasonable time; or there are safety considerations. If not walking, operates manual or electric wheelchair independently for a minimum of 150 feet; turns around; maneuvers the chair to a table, bed, toilet; negotiates at least a 3% grade; maneuvers on rugs and over doorsills.
- Independent: Walks a minimum of 150 feet without assisting devices. Does not use a wheelchair. Performs safely.
- Not applicable: (e.g., patient less than 7 years old, patient died, etc.)

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

DISABILITY AT DISCHARGE - EXPRESSION (MOTOR)

Data Format [combo] single-choice

Definition

A score calculated to derive a baseline of trauma patient motor (expression) disability at discharge from an acute care facility

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*Expression*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

1	Dependent - Total Help	2	Dependent - Partial Help
3	Independent with Device	4	Independent

Additional Information

- Used to auto-generate an additional calculated field: FIM Score (combination of Feeding, Locomotion, and Motor scores)
- Includes clear expression of verbal or nonverbal language. This means expressing linguistic information verbally or graphically with appropriate and accurate meaning and grammar
- Dependent - total help required: Expresses basic needs and ideas less than half of the time. Needs prompting more than half the time or does not express basic needs appropriately or consistently despite prompting
- Dependent - partial help required: Expresses basic needs and ideas about everyday situations half (50%) or more than half of the time. Requires some prompting, but requires that prompting less than half (50%) of the time
- Independent with Device: Expresses complex or abstract ideas with mild difficulty. May require an augmentative communication device or system
- Independent: Expresses complex or abstract ideas intelligibly and fluently, verbal or nonverbal, including signing or writing
- Not applicable: (e.g., patient less than 7 years old, patient died, etc.)

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

DISABILITY AT DISCHARGE - FIM SCORE

Data Format [number]

Definition

A score calculated (by adding together the Feeding, Independence, and Motor scores) to derive a baseline of trauma patient disability at discharge from an acute care facility, using three components: Feeding, Locomotion (Independence), and Motor (Expression)

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element
- Auto-calculated by combining Feeding, Locomotion, and Motor scores when entered

Data Source

- Billing Sheet / Medical Records Coding Summary Sheet
- Hospital Admission Form

National Element

HOSPITAL DISCHARGE DISPOSITION *

Data Format [combo] single-choice

Definition

The disposition of the patient when discharged from the hospital

XSD Data Type	xs: integer	**XSD Element / Domain (Simple Type)**	
Multiple Entry Configuration	No	HospitalDischargeDisposition	
Required in XSD	Yes	**Accepts Null Value**	Yes, common null values

Field Values

1 Discharged/Transferred to another acute care hospital using EMS
2 Discharged/Transferred to an Intermediate Care Facility
3 Discharged/Transferred to home under care of Home Health Agency
4 Left against medical advice (AMA)
5 Expired
6 Discharged home with no home services
7 Discharged/Transferred to skilled nursing facility
8 Discharged/Transferred to hospice care
9 Discharged/Transferred to another type of rehab or long-term care facility

Additional Information

- "Home" refers to the patient's current place of residence (e.g., prison, etc.)
- Field values based upon UB-04 disposition coding
- Disposition to any other non-medical facility should be coded as "Discharged home with no home services"
- Disposition to any other medical facility should be coded as "Discharged / Transferred to another type of rehab or long-term care facility"
- Refer to the glossary for definitions of facility types
- If ED Discharge Disposition is "Died", then Hospital Discharge Disposition should be NA

Data Source

1 Hospital Records
2 Billing Sheet / Medical Records Coding Summary Sheet
3 Physician Discharge Summary

National Element

- National Element O_05 from the 2012 National Trauma Data Standard

DATE & TIME OF DEATH

Data Format [Date] [Time]

Definition

Date and time the patient died

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

LOCATION OF DEATH

Data Format [combo] single-choice

Definition

The location where the patient died

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- ICU
- Floor
- ER
- OR
- Prior to Arrival

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

DEATH CIRCUMSTANCE

Data Format [combo] single-choice

Definition

Indicates patient's cause of death

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Brain Injury
- Burn Shock
- Cardio Failure
- Drowning
- Electrocution
- Heart Laceration
- Liver Laceration
- Multiple Organ Failure/Metabolic
- Other
- Pre-Existing Illness
- Pulmonary Failure
- Pulmonary Failure/Sepsis
- Thoracic Aortic Transection
- Trauma Shock
- Treatment Withheld
- Brain Death
- Sepsis
- Cardiac Arrest due to Strangulation
- Cardiac Arrest
- Family D/C Life Support
- Medical
- Multisystem Trauma
- Trauma Wound

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary
- Autopsy Report

OTHER (Death Circumstance) DESCRIPTION

Data Format [text]

Definition

The circumstance under which the patient died

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Death Circumstance is "Other"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary
- Autopsy Report

ORGAN DONATION

Data Format [combo] single-choice

Definition

To make a gift of a differentiated structure (as a heart, kidney, leaf, or stem) consisting of cells and tissues and performing some specific function in an organism

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*OrganDonation*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Yes
- No
- Tissue Donation

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Documentation

AUTOPSY

Data Format [combo] single-choice

Definition

An examination of a body after death to determine the cause of death or the character and extent of changes produced by disease

XSD Data Type	*xs: integer*	**XSD Element / Domain (Simple Type)**	*Autopsy*
Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values
Required in XSD	Yes		

Field Values

- Yes
- No

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Documentation

ADVANCED DIRECTIVE

Data Format [combo] single-choice

Definition

Advanced Directive

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Yes
- No

Additional Information

- Only completed if Hospital Disposition is "Expired"

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Hospital Outcome) DESTINATION DETERMINATION

Data Format [combo] single-choice

Definition

The reason the facility transferred this patient to another acute care hospital

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Hospital of Choice
- Specialty Resource Center

Additional Information

- Only completed if Hospital Disposition "Acute Care Hospital" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

HOSPITAL TRANSFERRED TO

Data Format [combo] single-choice

Definition

Name of the receiving facility the patient was transferred to

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Disposition "Acute Care Hospital", "Burn Care Facility", or "Rehab or long-term facility" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Other) FACILITY (Transferred to)

Data Format [text]

Definition

Any other identifying facility not found on the available list of options to which the patient was discharged

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Transferred to "Other" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Other) CITY (Transferred to)

Data Format [text]

Definition

The city in which the transfer facility is located

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Transferred to "Other" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Other) STATE (Transferred to)

Data Format [text]

Definition

The state in which the transfer facility is located

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Relevant value for data element

Additional Information

- Only completed if Hospital Transferred to "Other" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

(Discharge) TRANSPORT MODE

Data Format [combo] single-choice

Definition

Discharge transport mode

Multiple Entry Configuration	No	**Accepts Null Value**	Yes, common null values

Field Values

- Ambulance
- Helicopter
- Fixed Wing
- Police
- Private Vehicle

Additional Information

- Only completed if Hospital Disposition "Acute Care Hospital" is selected

Data Source

- Hospital Records
- Billing Sheet / Medical Records Coding Summary Sheet
- Physician Discharge Summary

Appendix 1: Auto Calculated Variables Based Upon Existing Data Elements

Variables Auto-Calculated Based on Existing Data Elements

1. *Trauma Registry Number (Data Element: TR5.12)*

   Definition: Number assigned by the registry software program or registrar that provides a unique identifier for a patient within a specific institution

   Calculation: Auto-Calculated

2. *Injury Intentionality (Data Element: TR20.11)*

   Definition: An indication of whether an injury was caused by an act carried out on purpose by oneself or by another person(s), with the goal of injuring or killing.

   Calculation: A matrix table grouping External Cause of Injury Codes (E-Codes) into two classifications: ***mechanism*** of injury or cause of death (e.g., falls, etc.) by ***intent*** of injury or manner of death (i.e., unintentional or "accidental", etc. [See Tables 1 and 2, pages 302-303). An electronic version of the CDC matrix may be viewed at: http://www.cdc.gov/injury/wisqars/ecode_matrix.html

3. *Trauma Type (Data Element: TR5.13)*

   Definition: An indication of the type (or nature) of trauma produced by an injury.

   Calculation: Injury diagnoses are categorized according to the Barell Matrix (See Tables 3 to 7, pages 304-308), a two-dimensional array of ICD-9-CM codes grouped by body region and nature of injury. An electronic version of the Barell Matrix may be viewed at: http://www.cdc.gov/nchs/data/ice/final_matrix_post_ice.pdf

4. *Total EMS Response Time*

   Definition: The total elapsed time from dispatch of the EMS transporting unit to scene arrival of the EMS transporting unit (i.e., the time the vehicle stopped moving).

   Calculation: EMS Unit Arrival on Scene DateTime – EMS Dispatch DateTime

5. *Total EMS Scene Time*

   Definition: The total elapsed time from EMS transporting unit scene arrival to EMS transporting unit scene departure (i.e., the time the vehicle started moving).

6. *Total EMS Time*

   Definition: The total elapsed time from dispatch of the EMS transporting unit to hospital arrival of the EMS transporting unit.

   Calculation: ED/Hospital Arrival DateTime – EMS Dispatch DateTime

7. *Overall GCS – EMS score (adult and pediatric)*

   Definition: A scale calculated in the pre-hospital setting which evaluates the patient's initial level of awareness, which indirectly indicates the extent of neurologic injury. The scale rates three categories of patient responses: eye opening, best verbal response, and best motor response. The lowest score is 3 and is indicative of no response; the highest score is 15 and indicates the patient is alert and aware of his or her surroundings.

   Calculation: Initial Field GCS Eye + Initial Field GCS Verbal + Initial Field GCS Motor

8. *Revised Trauma Score – EMS (adult and pediatric)*

   Definition: The Revised Trauma Score is a physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the pre-hospital setting.

   Calculation: RTS = 0.9368*(Initial Field GCS Total) + 0.7326*(Initial Field Systolic Blood Pressure) + 0.2908*(Initial Field Respiratory Rate)

9. *Overall GCS – Referring Hospital score (adult and pediatric)*

   Definition: A scale calculated at the referring hospital which evaluates the patient's initial level of awareness, which indirectly indicates the extent of neurologic injury. The scale rates three categories of patient responses: eye opening, best verbal response, and best motor response. The lowest score is 3 and is indicative of no response; the highest score is 15 and indicates the patient is alert and aware of his or her surroundings.

   Calculation: Referring Hospital GCS Eye + Referring Hospital GCS Verbal + Referring Hospital GCS Motor

10. *Revised Trauma Score – Referring Hospital (adult and pediatric)*

    Definition: The Revised Trauma Score is a physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient at the referring hospital.

    Calculation: RTS = 0.9368*(Referring Hospital GCS Total) + 0.7326*(Referring Hospital Systolic Blood Pressure) + 0.2908*(Referring Hospital Respiratory Rate)

11. *Total ED Time*

    Definition: The total elapsed time the patient was in the emergency department (ED)

    Calculation: ED Discharge DateTime – ED Arrival DateTime

12. *Overall GCS – ED score (adult and pediatric)*

Definition: A scale calculated in the ED or hospital setting which evaluates the patient's initial level of awareness, which indirectly indicates the extent of neurologic injury. The scale rates three categories of patient responses: eye opening, best verbal response, and best motor response. The lowest score is 3 and is indicative of no response; the highest score is 15 and indicates the patient is alert and aware of his or her surroundings.

Calculation: Initial ED/Hospital GCS Eye + Initial ED/Hospital GCS Verbal + Initial ED/Hospital GCS Motor

13. *Revised Trauma Score – ED (adult and pediatric)*

    Definition: The Revised Trauma Score is a physiological scoring system used to predict death from injury or need for trauma center care. It is scored based upon the initial vital signs obtained from the patient in the ED or hospital setting.

    Calculation: RTS = 0.9368*(Initial ED/Hospital GCS Total) + 0.7326*(Initial ED/Hospital Systolic Blood Pressure) + 0.2908*(Initial ED/Hospital Respiratory Rate)

14. *Abbreviated Injury Scale (six body regions)*

    Definition: The Abbreviated Injury Scale (AIS) is an anatomical scoring system first introduced in 1969. Since this time it has been revised and updated against survival to provide a ranking of the severity of injury. AIS scores are available for six body regions: Head/Neck (*Data Element: TR21.2)*, Face (*Data Element: TR21.5*), Chest (*Data Element: TR21.3*), Abdominal (*Data Element: TR21.6*), Extremities (including pelvis) (*Data Element: TR21.4*), and External (*Data Element TR21.7*). The AIS is monitored by a scaling committee of the Association for the Advancement of Automotive Medicine.

    Calculation: Injuries are ranked on a scale of 1 to 6, with 1 being minor, 5 severe and 6 an insurvivable injury. This represents the 'threat to life' associated with an injury and is not meant to represent a comprehensive measure of severity. The AIS is not a true scale, in that the difference between any two AIS scores is not the same as the difference between another set of two scores.

15. *Injury Severity Score (Data Element: TR21.8)*

    Definition: The Injury Severity Score (ISS) is an anatomical scoring system that provides an overall score for patients with multiple injuries.

    Calculation: Each injury is assigned an AIS score and is allocated to one of six body regions. The 3 most severely injured body regions have their AIS score squared and added together to produce the ISS score. Only the highest AIS score in each body region is used. The ISS score takes values from 0 to 75. If an injury is assigned an AIS of 6 (Insurvivable injury), the ISS score is automatically assigned to 75. An electronic version of this information may be viewed at: http://www.trauma.org/archive/scores/iss.html

16. *Probability of Survival (Data Element: TR21.9)*

Definition: The Trauma Score – Injury Severity Score (TRISS) determines the probability of survival (Ps) of a patient from the ISS, RTS, and patient's age.

Calculation: The following formula is used: $Ps = 1 / (1 + e^{-b})$

'b' is calculated from: b = b0 + b1(RTS) + b2(ISS) + b3(AgeIndex).

b0 to b3 are coefficients derived from multiple regression analysis of the Major Trauma Outcomes Study (MTOS) database. The coefficients are different for blunt and penetrating trauma. If the patient is less that 15 years of age, the blunt coefficients are used regardless of the mechanism.

	Blunt	**Penetrating**
b0	-0.4499	-2.5355
b1	0.8085	0.9934
b2	-0.0835	-0.0651
b3	-1.7430	-1.1360

AgeIndex is 0 if the patient is below 54 years of age or 1 if 55 years of age and over. An electronic version of this information may be viewed at: http://www.trauma.org/archive/scores/triss.html

17. *New Injury Severity Score (Data Element: TR21.24)*

Definition: As multiple injuries within the same body region are only assigned a single score, a proposed modification of ISS, the "New Injury Severity Score" (NISS), was proposed.

Calculation: This is similar to how ISS is calculated, but NISS is calculated as the sum of the squares of the top three scores regardless of body region.

18. *Total Length of Hospital Stay (Data Element: TR25.44)*

Definition: The total elapsed time the patient was in the hospital.

Calculation: Hospital Discharge DateTime – ED/Hospital Arrival DateTime

Table 1: Modification of the Injury Intentionality CDC Matrix (Cut/Pierce to Overexertion)

	Manner/Intent				
Mechanism/Cause	**Unintentional**	**Self-inflicted**	**Assault**	**Undetermined**	**Other**
Cut/pierce	E920.0-.9	E956	E966	E986	E974
Drowning / submersion	E830.0-.9 E832.0-.9 E910.0-.9	E954	E964	E984	
Fall	E880.0-E886.9 E888	E957.0-.9	E968.1	E987.0-.9	
Fire/burn	E890.0-E899 E924.0-.9	E958(.1,.2,.7)	E961 E968(.0,.3) E979.3	E988(.1,.2,.7)	
Fire/Flame	E890.0-E899	E958.1	E968.0 E979.3	E988.1	
Hot object / substance	E924.0-.9	E958.2 E958.7	E961 E968.3	E988.2 E988.7	
Firearm	E922.0-.3 E922(.8,.9)	E955.0-.4	E965.0-.4 E979.4	E985.0-.4	E970
Machinery	E919.0-.9				
Motor Vehicle Traffic	E810-E819(.0-.9)	E958.5	E968.5	E988.5	
Occupant	E810-E819(.0) E810-E819(.1)				
Motorcyclist	E810-E819(.2) E810-E819(.3)				
Pedal Cyclist	E810-819(.6)				
Pedestrian	E810-819(.7)				
Unspecified	E810-E819(.9)				
Pedal Cyclist, Other	E800-E807(.3) E820-E825(.6) E826.1,.9 E827-E829(.1)				
Pedestrian, Other	E800-E807(.2) E820-E825(.7) E826-E829(.0)				
Transport, Other	E800-E807(.0,.1,.8,.9) E820-E825(.0-.5,.8,.9) E826.2-.8 E827-E829(.2-.9) E831.0-.9 E833.0-E845.9	E958.6		E988.6	
Natural/Environmental	E900.00-E909 E928.0-.2	E958.3		E958.3	
Bites/Stings	E905.0-.6,.9 E906.0-.4,.5,.9				
Overexertion	E927				

Table 2: Modification of the Injury Intentionality CDC Matrix (Poisoning to All External Causes)

	Manner/Intent				
Mechanism/Cause	**Unintentional**	**Self-inflicted**	**Assault**	**Undetermined**	**Other**
Poisoning	E850.0-E869.9	E950.0-E952.9	E962.0-.9 E979.6 E979.7	E980.0-E982.9	E972
Struck by, Against	E916-E917.9		E960.0 E968.2		E973 E975
Suffocation	E911-E913.9	E953.0-.9	E963	E983.0-.9	
Other Specified and Classifiable	E846-E848 E914-E915 E918 E921.0-.9 E922.4 E922.5 E923.0-.9 E925.0-E926.9 E928.3-.5 E929.0-.5	E955.5 E955.6 E955.7 E955.9 E958.0 E958.4	E960.1 E965.5-.9 E967.0-.9 E968.4,.6,.7 E979.0-.2, E979.5 E979.8 E979.9	E985.5 E985.6 E985.7 E988.0 E988.4	E971 E978 E990-E994 E996 E997.0-.2
Unspecified	E887 E928.9 E929.9	E958.9	E968.9	E988.9	E976 E997.9
All Injury	E800-E869 E880-E929	E950-E959	E960-E969 E979 E999.1	E980-E989	E970-E978 E990-E999.0
Adverse Effects					E870-E879 E930.0-E949.9
Medical Care					E870-879
Drugs					E930.0-e949.9
All external causes					E800-E999

Source: http://www.cdc.gov/injury/wisqars/ecode_matrix.html

Table 3: Modification of the Barell Injury Diagnosis Matrix, Classification by Body Region (Head and Neck) and Nature of the Injury

Head and Neck								
	Traumatic Brain Injury			Other Head, Face, and Neck				
	Type 1 TBI	Type 2 TBI	Type 3 TBI	Other Head	Face	Eye	Neck	Head, Face, & Neck Unspecified
Fracture 800-829	800,801,803 ,804(.1-.4, .6-.9) 800,801,803 ,804(.03-.05, .53-.55)	800,801,803 ,804(.00, .02,.06,.09) 800,801,803 ,804(.50, .52,.56,.59)	800.1 800.51 803.1 803.51 804.1 804.51	-	802	-	807.5 807.6	-
Dislocation 830-839	-	-	-	-	830	-	-	-
Sprains & Strains 840-848	-	-	-	-	848.0-.1	-	848.2	-
Internal 850-854 860-869 952 995.55	850(.2-.4) 851 852 853 854 995.55	850.0 850.1 850.5 850.9	-	-	-	-	-	-
Open Wound 870-884 890-894	-	-	-	873.0-.1, .8-.9	872 873.2-.7	870 871	874	-
Amputations 885-887 895-897	-	-	-	-	-	-	-	-
Blood Vessels 900-904	-	-	-	-	-	-	-	900
Contusion / Superficial 910-924	-	-	-	-	-	918 921	-	910 920
Crush 925-929	-	-	-	-	-	-	925.2	925.1
Burns 940-949	-	-	-	941.x6	941.x1 941.x3-.x5 941.x7	940 941.x2	941.x8	941.x0 941.x9 947.0
Nerves 950-951 953-957	950(.1-.3)	-	-	951	-	950.0 950.9	953.0 954.0	957
Unspecified 959	-	-	-	959.01	-	-	-	959.09

Source: http://www.cdc.gov/nchs/data/ice/final_matrix_post_ice.pdf

Table 4: Modification of the Barell Injury Diagnosis Matrix, Classification by Body Region (Spine and Back) and Nature of the Injury

Spine and Back										
	Spinal Cord (SCI)					Vertebral Column (VCI)				
	Cervical SCI	Thoracic / Dorsal SCI	Lumbar SCI	Sacrum Coccyx SCI	Spine + Back unspecified SCI	Cervical VCI	Thoracic / Dorsal VCI	Lumbar VCI	Sacrum Coccyx VCI	Spine + Back unspecified SCI
Fracture 800-829	806.0-.1	806.2-.3	806.4-.5	806.6-.7	806.8-.9	805.0-.1	805.2-.3	805.4-.5	805.6-.7	805.8-.9
Dislocation 830-839	-	-	-	-	-	839.0-.1	839.21 839.31	839.20 839.30	839.41-.42 839.51-.52	839.40 839.49 839.50 839.59
Sprains & Strains 840-848	-	-	-	-	-	847.0	847.1	847.2	847.3-.4	-
Internal 850-854 860-869 952 995.55	952	952.1	952.2	952.3-.4	952.8-.9	-	-	-	-	-
Open Wound 870-884 890-894	-	-	-	-	-	-	-	-	-	-
Amputations 885-887 895-897	-	-	-	-	-	-	-	-	-	-
Blood Vessels 900-904	-	-	-	-	-	-	-	-	-	-
Contusion / Superficial 910-924	-	-	-	-	-	-	-	-	-	-
Crush 925-929	-	-	-	-	-	-	-	-	-	-
Burns 940-949	-	-	-	-	-	-	-	-	-	-
Nerves 950-951 953-957	-	-	-	-	-	-	-	-	-	-
Unspecified 959	-	-	-	-	-	-	-	-	-	-

Source: http://www.cdc.gov/nchs/data/ice/final_matrix_post_ice.pdf

Table 5: Modification of the Barell Injury Diagnosis Matrix, Classification by Body Region (Torso) and Nature of the Injury

Torso					
	Torso				
	Chest (Thorax)	Abdomen	Pelvis & Urogenital	Trunk	Back and Buttock
Fracture 800-829	807.0-.4	-	808	809	-
Dislocation 830-839	839.61 839.71	-	839.69 839.79	-	-
Sprains & Strains 840-848	848.3-.4	-	846 848.5	-	847.9
Internal 850-854 860-869 952 995.55	860-862	863-866 868	867	-	-
Open Wound 870-884 890-894	875 879.0-.1	879.2-.5	877-878	879.6-.7	876
Amputations 885-887 895-897	-	-	-	-	-
Blood Vessels 900-904	901	902.0-.4	902.5 902(.81-.82)	-	-
Contusion / Superficial 910-924	922.0 922.1 922.33	922.2	922.4	911 922.8-.9	922.31-.32
Crush 925-929	926.19	-	926.0 926.12	926.8-.9	926.11
Burns 940-949	942.x1-.x2	942.x3 947.3	942.x5 947.4	942.x0 942.x9	942.x4
Nerves 950-951 953-957	953.1	953.2 953.5	953.3	954.1 954.8-.9	-
Unspecified 959	-	-	x	959.1	-

Source: http://www.cdc.gov/nchs/data/ice/final_matrix_post_ice.pdf

Table 6: Modification of the Barell Injury Diagnosis Matrix, Classification by Body Region (Extremities) and Nature of the Injury

Extremities										
	Upper				Lower					
	Shoulder & Upper Arm	Forearm & Elbow	Wrist, Hand, & Fingers	Other & Unspecified	Hip	Upper Leg & Thigh	Knee	Lower Leg & Ankle	Foot & Toes	Other & Unspecified
Fracture 800-829	810-812	813	814-817	818	820	821	822	823-824	825-826	827
Dislocation 830-839	831	832	833 834	-	835	-	836	837	838	-
Sprains & Strains 840-848	840	841	842	-	843	-	844.0-.3	845.0	845.1	844.8 844.9
Internal 850-854 860-869 952 995.55	-	-	-	-	-	-	-	-	-	-
Open Wound 870-884 890-894	880	881.x0-.x1	881.x2 882 883	884	X	X	X	X	892-893	890-891 894
Amputations 885-887 895-897	887.2-.3	887.0-.1	885-886	887.4-.7	-	897.2-.3	-	897.0-.1	895-896	897.4-.7
Blood Vessels 900-904	-	-	-	903	-	-	-	-	-	904.0-.8
Contusion / Superficial 910-924	912 923.0	923.1	914-915 923.2-.3	913 923.8 923.9	924.01	924.00	924.11	924.10 924.21	917 924.3 924.20	916 924.4-.5
Crush 925-929	927.0	927.1	927.2-.3	927.8-.9	928.01	928.00	928.11	928.10 928.21	928.3 928.20	928.8 928.9
Burns 940-949	943.x3-.x6	943.x1-.x2	944	943.x0 943.x9	-	945.x6	945.x5	945.x3-.x4	945.x1-.x2	945.x0-.x9
Nerves 950-951 953-957	-	-	-	953.4 955	-	-	-	-	-	-
Unspecified 959	959.2	-	959.4-.5	959.3	-	-	-	-	-	959.6-.7

Source: http://www.cdc.gov/nchs/data/ice/final_matrix_post_ice.pdf

Table 7: Modification of the Barell Injury Diagnosis Matrix, Classification by Body Region (Unclassifiable by Site) and Nature of the Injury

	Unclassifiable by Site		
	Other & Unspecified		System Wide
	Other / Multiple	Unspecified Site	System-wide & Late Effects
Fracture 800-829	819 828	829	
Dislocation 830-839	-	823.8-.9	
Sprains & Strains 840-848	-	848.8-.9	
Internal 850-854 860-869 952 995.55	-	869	
Open Wound 870-884 890-894	-	879.8-.9	930-939 958
Amputations 885-887 895-897	-	-	960-979 980-989 990-994
Blood Vessels 900-904	902.87 902.89	902.9 904.9	995.50-.54 995.59
Contusion / Superficial 910-924	-	919 924.8 924.9	995.80-.85 805-909 909.3 909.5
Crush 925-929	-	929	
Burns 940-949	947.1-.2	946 947.8 947.9 948 949	
Nerves 950-951 953-957	953.8 956	953.9 957.1 957.8 957.9	
Unspecified 959	-	959.8 959.9	

Source: http://www.cdc.gov/nchs/data/ice/final_matrix_post_ice.pdf

Appendix 2: Indiana Hospitals

Hospital Name	City / Town	District	Zip	Trauma Center	CAH
ADAMS MEMORIAL HOSPITAL	DECATUR	3	46733		Yes
BLUFFTON REGIONAL MEDICAL CENTER	BLUFFTON	3	46714		
CAMERON MEMORIAL COMMUNITY HOSPI	ANGOLA	3	46703		Yes
CLARK MEMORIAL HOSPITAL	JEFFERSONVILLE	9	47130		
COLUMBUS REGIONAL HOSPITAL	COLUMBUS	8	47201		
COMMUNITY HOSPITAL (MUNSTER)	MUNSTER	1	46321		
COMMUNITY HOSPITAL EAST	INDIANAPOLIS	5	46219		
COMMUNITY HOSPITAL NORTH	INDIANAPOLIS	5	46256		
COMMUNITY HOSPITAL OF ANDERSON &	ANDERSON	6	46011		
COMMUNITY HOSPITAL OF BREMEN, IN	BREMEN	2	46506		Yes
COMMUNITY HOSPITAL SOUTH	INDIANAPOLIS	5	46227		
DAVIESS COMMUNITY HOSPITAL	WASHINGTON	10	47501		
DEACONESS HOSPITAL	EVANSVILLE	10	47747	Yes	
DEARBORN COUNTY HOSPITAL	LAWRENCEBURG	9	47025		
DECATUR COUNTY MEMORIAL HOSPITAL	GREENSBURG	9	47240		Yes
DEKALB HEALTH	AUBURN	3	46706		
DOCTOR'S HOSPITAL	BREMEN	2	46506		
DUKES MEMORIAL HOSPITAL	PERU	3	46970		Yes
DUPONT HOSPITAL	FORT WAYNE	3	46825		
ELKHART GENERAL HOSPITAL	ELKHART	2	46514		
FAYETTE REGIONAL HEALTH SYSTEM	CONNERSVILLE	6	47331		
FLOYD MEMORIAL HOSPITAL AND HEALTH SERVICES	NEW ALBANY	9	47150		
FRANCISCAN ST ANTHONY HEALTH - CROWN POINT	CROWN POINT	1	46307		
FRANCISCAN ST ANTHONY HEALTH - MICHIGAN CITY	MICHIGAN CITY	1	46360		
FRANCISCAN ST ELISABETH HEALTH - CRAWFORDSVILLE	CRAWFORDSVILLE	4	47933		
FRANCISCAN ST ELIZABETH HEALTH - LAFAYETTE CENTRAL	LAFAYETTE	4	47904		
FRANCISCAN ST ELIZABETH HEALTH - LAFAYETTE EAST	LAFAYETTE	4	47905		
FRANCISCAN ST FRANCIS HEALTH - BEACH GROVE	BEECH GROVE	5	46107		
FRANCISCAN ST FRANCIS HEALTH - INDIANAPOLIS	INDIANAPOLIS	5	46237		
FRANCISCAN ST FRANCIS HEALTH - MOORESVILLE	MOORESVILLE	5	46158		
FRANCISCAN ST MARGARET HEALTH - DYER	DYER	1	46311		
FRANCISCAN ST MARGARET HEALTH - HAMMOND	HAMMOND	1	46320		
GIBSON GENERAL HOSPITAL	PRINCETON	10	47670		Yes
GOOD SAMARITAN HOSPITAL	VINCENNES	10	47591		
GREENE COUNTY GENERAL HOSPITAL	LINTON	7	47441		Yes
HANCOCK REGIONAL HOSPITAL	GREENFIELD	5	46140		
HARRISON COUNTY HOSPITAL	CORYDON	9	47112		Yes
HENDRICKS REGIONAL HEALTH	DANVILLE	5	46122		
HENRY COUNTY MEMORIAL HOSPITAL	NEW CASTLE	6	47362		
HOWARD REGIONAL HEALTH SYSTEM	KOKOMO	6	46902		
IU HEALTH - BALL MEMORIAL HOSPITAL	MUNCIE	6	47303		
IU HEALTH - BEDFORD HOSPITAL	BEDFORD	8	47421		Yes
IU HEALTH - BLACKFORD HOSPITAL	HARTFORD CITY	6	47348		Yes
IU HEALTH - BLOOMINGTON HOSPITAL	BLOOMINGTON	8	47403		
IU HEALTH - METHODIST HOSPITAL	INDIANAPOLIS	5	46206	Yes	

IU HEALTH - RILEY HOSPITAL FOR CHILDREN	INDIANAPOLIS	5	46202	Yes	
IU HEALTH ARNETT HOSPITAL	Lafayette	4	47905		
IU HEALTH GOSHEN HOSPITAL	GOSHEN	2	46526		
IU HEALTH LA PORTE HOSPITAL	LA PORTE	1	46350		
IU HEALTH MORGAN HOSPITAL INC	MARTINSVILLE	5	46151		
IU HEALTH RTH HOSPITAL	CARMEL	5	46032		
IU HEALTH PAOLI HOSPITAL	PAOLI	8	47454		Yes
IU HEALTH SAXONY HOSPITAL	FISHERS	5	46037		
IU HEALTH STARKE HOSPITAL	KNOX	2	46534		
IU HEALTH TIPTON HOSPITAL INC	TIPTON	6	46072		Yes
IU HEALTH WEST HOSPITAL	AVON	5	46123		
IU HEALTH WHITE MEMORIAL HOSPITAL	MONTICELLO	4	47960		Yes
JASPER COUNTY HOSPITAL	RENSSELAER	1	47978		Yes
JAY COUNTY HOSPITAL	PORTLAND	6	47371		Yes
JOHNSON MEMORIAL HOSPITAL	FRANKLIN	5	46131		
KING'S DAUGHTERS' HOSPITAL AND HEALTH SERVICES, THE	MADISON	9	47250		
KOSCIUSKO COMMUNITY HOSPITAL	WARSAW	2	46580		
LUTHERAN HOSPITAL OF INDIANA	FORT WAYNE	3	46804	Yes	
MAJOR HOSPITAL	SHELBYVILLE	5	46176		
MARGARET MARY COMMUNITY HOSPITAL INC	BATESVILLE	9	47006		Yes
MARION GENERAL HOSPITAL	MARION	6	46952		
MEMORIAL HOSPITAL & HEALTH CARE CENTER	JASPER	10	47546		
MEMORIAL HOSPITAL LOGANSPORT	LOGANSPORT	4	46947		
MEMORIAL HOSPITAL OF SOUTH BEND	SOUTH BEND	2	46601	Yes	
METHODIST HOSPITALS INC RTHLAKE CAMPUS	GARY	1	46402		
METHODIST HOSPITALS INC SOUTHLAKE CAMPUS	MERRILLVILLE	1	46410		
MONROE HOSPITAL	BLOOMINGTON	8	47403		
PARKVIEW HOSPITAL	FORT WAYNE	3	46805	Yes	
PARKVIEW HUNTINGTON HOSPITAL	HUNTINGTON	3	46750		
PARKVIEW LAGRANGE HOSPITAL	LAGRANGE	3	46761		Yes
PARKVIEW NOBLE HOSPITAL	KENDALLVILLE	3	46755		
PARKVIEW NORTH HOSPITAL	FORT WAYNE	3	46845		
PARKVIEW WHITLEY HOSPITAL	COLUMBIA CITY	3	46725		
PERRY COUNTY MEMORIAL HOSPITAL	TELL CITY	10	47586		Yes
PEYTON MANNING CHILDREN'S HOSPITAL AT ST. VINCENT	INDIANAPOLIS	5	46260		
PORTER - PORTAGE HOSPITAL	PORTAGE	1	46368		
PORTER - VALPARAISO HOSPITAL	VALPARAISO	1	46383		
PULASKI MEMORIAL HOSPITAL	WINAMAC	2	46996		Yes
PUTNAM COUNTY HOSPITAL	GREENCASTLE	7	46135		Yes
REID HOSPITAL & HEALTH CARE SERVICES	RICHMOND	6	47374		
RIVERVIEW HOSPITAL	NOBLESVILLE	5	46060		
RUSH MEMORIAL HOSPITAL	RUSHVILLE	6	46713		Yes
SAINT CATHERINE REGIONAL HOSPITA	CHARLESTOWN	9	47111		
SCHNECK MEDICAL CENTER	SEYMOUR	8	47274		
SCOTT COUNTY MEMORIAL HOSPITAL	SCOTTSBURG	9	47170		Yes
ST CATHERINE HOSPITAL INC	EAST CHICAGO	1	46312		
ST JOHN'S HEALTH SYSTEM	ANDERSON	6	46016		
ST JOSEPH HOSPITAL	FORT WAYNE	3	46802		
ST JOSEPH HOSPITAL & HEALTH CENTER (KOKOMO)	KOKOMO	6	46904		

ST JOSEPH REGIONAL MEDICAL CENTER MISHAWAKA	MISHAWAKA	2	46544		
ST JOSEPH REGIONAL MEDICAL CENTER PLYMOUTH	PLYMOUTH	2	46563		
ST MARY MEDICAL CENTER HOBART	HOBART	1	46342		
ST MARY'S MEDICAL CENTER OF EVANSVILLE	EVANSVILLE	10	47750	Yes	
ST MARY'S WARRICK HOSPITAL	BOONVILLE	10	47601		Yes
ST VINCENT CARMEL HOSPITAL	CARMEL	5	46032		
ST VINCENT CLAY HOSPITAL	BRAZIL	7	47834		Yes
ST VINCENT DUNN HOSPITAL INC	BEDFORD	8	47421		Yes
ST VINCENT FRANKFORT HOSPITAL	FRANKFORT	4	46041		Yes
ST VINCENT HOSPITAL - INDIANAPOLIS	INDIANAPOLIS	5	46260		
ST VINCENT JENNINGS HOSPITAL	NORTH VERNON	9	47265		Yes
ST VINCENT MEDICAL CENTER NORTHEAST	FISHERS	5	46037		
ST VINCENT MERCY HOSPITAL, INC	ELWOOD	6	46036		Yes
ST VINCENT RANDOLPH HOSPITAL	WINCHESTER	6	47394		Yes
ST VINCENT SALEM HOSPITAL	SALEM	8	47167		Yes
ST VINCENT WILLIAMSPORT HOSPITAL	WILLIAMSPORT	4	47993		Yes
SULLIVAN COUNTY COMMUNITY HOSPIT	SULLIVAN	7	47882		Yes
TERRE HAUTE REGIONAL HOSPITAL	TERRE HAUTE	7	47802		
THE HEART HOSPITAL AT DEACONESS GATEWAY LLC	NEWBURGH	10	47630		
UNION HOSPITAL CLINTON	CLINTON	7	47842		
UNION HOSPITAL, INC	TERRE HAUTE	7	47804		Yes
WABASH COUNTY HOSPITAL	WABASH	3	46992		Yes
WESTVIEW HOSPITAL	INDIANAPOLIS	5	46222		
WISHARD HEALTH SERVICES	INDIANAPOLIS	5	46202	Yes	
WITHAM HEALTH SERVICES	LEBANON	5	46052		
WOODLAWN HOSPITAL	ROCHESTER	2	46975		Yes

Appendix 3: Glossary of Terms

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Based on the 2012 NTDB Data Dictionary "Glossary of Terms"

Co-Morbid Conditions

Alcoholism: Evidence of chronic use, such as withdrawal episodes. Exclude isolated elevated blood alcohol level in absence of history of abuse.

ICD-9 Code Range: 291.0 -291.3, 291.81, 291.9, 303.90-303.93, V11.3

Ascites within 30 days: The presence of fluid accumulation (other than blood) in the peritoneal cavity noted on physical examination, abdominal ultrasound, or abdominal CT/MRI.

ICD-9 Code Range: 789.51, 789.59

Bleeding disorder: Any condition that places the patient at risk for excessive bleeding due to a deficiency of blood clotting elements (e.g., vitamin K deficiency, hemophilia, thrombocytopenia, chronic anticoagulation therapy with Coumadin, Plavix, or similar medications). Do not include patients on chronic aspirin therapy.

ICD-9 Code Range: 286.0-286.9; 287.1-287.49; V58.61; V58.63

Currently receiving chemotherapy for cancer: A patient who is currently receiving any chemotherapy treatment for cancer prior to admission. Chemotherapy may include, but is not restricted to, oral and parenteral treatment with chemotherapeutic agents for malignancies such as colon, breast, lung, head and neck, and gastrointestinal solid tumors as well as lymphatic and hematopoietic malignancies such as lymphoma, leukemia, and multiple myeloma.

Congenital Anomalies: Defined as documentation of a cardiac, pulmonary, body wall, CNS/spinal, GI, renal, orthopaedic, or metabolic congenital anomaly.

ICD-9 Code Range: 740.0 through 759.89

Congestive heart failure: Defined as the inability of the heart to pump a sufficient quantity of blood to meet the metabolic needs of the body or can do so only at an increased ventricular filling pressure. To be included, this condition must be noted in the medical record as CHF, congestive heart failure, or pulmonary edema with onset or increasing symptoms within 30 days prior to injury. Common manifestations are:

1. Abnormal limitation in exercise tolerance due to dyspnea or fatigue

2. Orthopnea (dyspnea on lying supine)

3. Paroxysmal nocturnal dyspnea (awakening from sleep with dyspnea)

4. Increased jugular venous pressure

5. Pulmonary rales on physical examination

6. Cardiomegaly

7. Pulmonary vascular engorgement

ICD-9 Code Range: 398.91, 428.0 - 428.9, 402.01, 402.11, 402.91, 404.11, 404.13, 404.91, 425.0-425.4

Current smoker: A patient who reports smoking cigarettes every day or some days. This excludes patients who smoke cigars or pipes or use smokeless tobacco (chewing tobacco or snuff).

Chronic renal failure: Acute or chronic renal failure prior to injury that was requiring periodic peritoneal dialysis, hemodialysis, hemofiltration, or hemodiafiltration.

ICD-9 Code Range: 403.01, 403.11, 403.91, 404.02, 404.12, 404.03, 404.13, 404.92, 404.93

CVA/residual neurological deficit: A history prior to injury of a cerebrovascular accident (embolic, thrombotic, or hemorrhagic) with persistent residual motor sensory, or cognitive dysfunction. (E.g., hemiplegia, hemiparesis, aphasia, sensory deficit, impaired memory).

ICD-9 Code Range: 434.01, 434.11, 434.91, 433.01-433.91, 438.0-438.9

Diabetes mellitus: Diabetes mellitus prior to injury that required exogenous parenteral insulin or an oral hypoglycemic agent.

ICD-9 Code Range: 250.00-250.93

Disseminated cancer: Patients who have cancer that:

1. Has spread to one site or more sites in addition to the primary site AND

2. In whom the presence of multiple metastases indicates the cancer is widespread, fulminant, or near terminal. Other terms describing disseminated cancer include “diffuse,” “widely metastatic,” “widespread,” or “carcinomatosis.” Common sites of metastases include major organs (e.g., brain, lung, liver, meninges, abdomen, peritoneum, pleura, bone).

ICD-9 Code Range: 196.0-199.1

Advanced directive limiting care: The patient had a Do Not Resuscitate (DNR) document or similar advance directive recorded prior to injury.

Esophageal varices: Esophageal varices are engorged collateral veins in the esophagus which bypass a scarred liver to carry portal blood to the superior vena cava. A sustained increase in portal pressure results in esophageal varices which are most frequently demonstrated by direct visualization at esophagoscopy.

ICD-9 Code Range: 456.0-456.21

Functionally dependent health status: Pre-injury functional status may be represented by the ability of the patient to complete activities of daily living (ADL) including: bathing, feeding, dressing, toileting, and walking. This item is marked YES if the patient, prior to injury, was partially dependent or completely dependent upon equipment, devices or another person to complete some or all activities of daily living. Formal definitions of dependency are listed below:

1. Partially dependent: The patient requires the use of equipment or devices coupled with assistance from another person for some activities of daily living. Any patient coming from a nursing home setting who is not totally dependent would fall into this category, as would any patient who requires kidney dialysis or home ventilator support that requires chronic oxygen therapy yet maintains some independent functions.

2. Totally dependent: The patient cannot perform any activities of daily living for himself/herself. This would include a patient who is totally dependent upon nursing care, or a dependent nursing home patient. All patients with psychiatric illnesses should be evaluated for their ability to function with or without assistance with ADLs just as the non-psychiatric patient.

History of angina within past 1 month: Pain or discomfort between the diaphragm and the mandible resulting from myocardial ischemia. Typically angina is a dull, diffuse (fist sized or larger) substernal chest discomfort precipitated by exertion or emotion and relieved by rest or nitroglycerine. Radiation often occurs to the arms and shoulders and occasionally to the neck, jaw (mandible, not maxilla), or interscapular region. For patients on anti-anginal medications, enter yes only if the patient has had angina within one month prior to admission.

ICD-9 Code Range: 413.0-413.9

History of myocardial infarction: The history of a non-Q wave, or a Q wave infarction in the six months prior to injury as diagnosed in the patient's medical record.

ICD-9 Code Range: 410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91

History of PVD (History of peripheral vascular disease): Any type of operative (open) or interventional radiology angioplasty or revascularization procedure for atherosclerotic PVD (e.g., aorta-femoral, femoral-femoral,

femoral-popliteal, balloon angioplasty, stenting, etc.). Patients who have had amputation for trauma or resection/repair of abdominal aortic aneurysms, including Endovascular Repair of Abdominal Aortic Aneurysm (EVAR), would not be included.

ICD-9 Code Range: 440.20-440.29, 440.30-440.32 and 443.9

Hypertension requiring medication: History of a persistent elevation of systolic blood pressure >140 mm Hg and a diastolic blood pressure >90 mm Hg requiring an antihypertensive treatment (e.g., diuretics, beta blockers, *angiotensin-converting enzyme (*ACE*)* inhibitors, calcium channel blockers).

ICD-9 Code Range 401.0, 401.1, 401.9, 642.00-642.04 642.20-642.24 642.30-642.34, 402.0-402.91; 403.00-403.91; 404.00-404.93; 405.01-405.99;

Prematurity*:* Defined as documentation of premature birth, a history of bronchopulmonary dysplasia, *or* ventilator support for greater than 7 days after birth. Premature birth is defined as infants delivered before 37 weeks from the first day of the last menstrual period.

ICD-9 Code Range: 765.00-765.19, 765.20-765.29, 770.7

Obesity: Defined as a Body Mass Index of 30 or greater.

ICD-9 Code Range: 278.00-278.01,V85.3-V85.4

Respiratory Disease: Defined as severe chronic lung disease, chronic asthma*,* cystic fibrosis*,* or *chronic obstructive pulmonary disease (COPD) such as emphysema and/or chronic bronchitis* resulting in any one or more of the following:

1. Functional disability from COPD (e.g., dyspnea, inability to perform *activities of daily living [ADLs]*)
2. Hospitalization in the past for treatment of COPD
3. Requires chronic bronchodilator therapy with oral or inhaled agents
4. *A Forced Expiratory Volume in 1 second (FEV1)* of <75% of predicted on pulmonary function testing

Do not include patients whose only pulmonary disease is *acute* asthma. Do not include patients with diffuse interstitial fibrosis or sarcoidosis.

ICD-9 Code Range: 011.00-011.66, 011.8-011.99, 012.0-012.9, 277.02, 491.0-491.9, 492.0-492.8, 493.00-493.92, 494.0-494.1, 495.0-495.9, 496, 518.2, 518.83-518.89

Steroid use: Patients that required the regular administration of oral or parenteral corticosteroid medications (e.g., prednisone, dexamethasone in the 30 days prior to injury for a chronic medical condition (e.g., COPD, asthma, rheumatologic disease, rheumatoid arthritis, inflammatory bowel disease). Do not include topical corticosteroids applied to the skin or corticosteroids administered by inhalation or rectally.

ICD-9 Code Range: V58.65

Cirrhosis: Documentation in the medical record of cirrhosis, which might also be referred to as end stage liver disease. If there is documentation of prior or present esophageal or gastric varices, portal hypertension, previous hepatic encephalopathy, or ascites with notation of liver disease, then cirrhosis should be considered present. Cirrhosis should also be considered present if documented by diagnostic imaging studies or a laparotomy/laparoscopy.

ICD-9 Code Range: 571.2, 571.5, 571.6, 571.8, 571.9, 572.2, 572.3, 572.4, 572.8

Dementia: With particular attention to senile or vascular dementia (eg Alzheimer's).

ICD-9 Code range: 290.0-290.43, 294.0-294.11, 331.0-331.2, 331.82-331.89, 332.0-332.1, 333.0, 333.4,

Major psychiatric illness: Defined as documentation of the presence of pre-injury major depressive disorder, bipolar disorder, schizophrenia, anxiety / panic disorder, borderline or antisocial personality disorder, and / or adjustment disorder / post-traumatic stress disorder.

ICD-9 Code range: 295.00-297.9, 300.0-300.09, 301.0-301.7, 301.83, 309.81, 311, V11.0-V11.2, V11.4-V11.8

Drug abuse or dependence: With particular attention to opioid, sedative, amphetamine, cocaine, diazepam, alprazolam, or lorazepam dependence (excludes ADD / ADHD or chronic pain with medication use as-prescribed).

ICD-9 Code Range: 304.00-304.8, 305.2-305.9

***Pre-hospital cardiac arrest with CPR*:** A sudden, abrupt loss of cardiac function which occurs outside of the hospital, prior to admission at the center in which the registry is maintained, that results in loss of consciousness requiring the initiation of any component of basic and/or advanced cardiac life support by a health care provider.

Hospital Complications

Acute kidney injury: A patient who did not require chronic renal replacement therapy prior to injury, who has worsening renal dysfunction after injury requiring renal replacement therapy. If the patient or family refuses treatment (e.g., dialysis), the condition is still considered to be present if a combination of oliguria and creatinine are present.

GFR criteria: Increase creatinine x3 or GFR decrease > 75%

Urine output criteria: UO < 0.3ml/kg/h x 24 hr or Anuria x 12 hrs

ICD-9 Code Range: 584.5-584.9; 588.0-588.9 585.1, 585.89, 585.9, 593.9, 958.5

ALI/ARDS: **Acute Lung Injury/Adult (Acute) Respiratory Distress Syndrome:** ALI/ARDS occurs in conjunction with catastrophic medical conditions, such as pneumonia, shock, sepsis (or severe infection throughout the body, sometimes also referred to as systemic infection, and may include or also be called a blood or blood-borne infection), and trauma. It is a form of sudden and often severe lung failure that is usually characterized by a PaO2 / FiO2 ratio of < 300 mmHg, bilateral fluffy infiltrates seen on a frontal chest radiograph, and an absence of clearly demonstrable volume overload (as signified by pulmonary wedge pressure < 18 mmHg, if measured, or other similar surrogates such as echocardiography which do not demonstrate analogous findings).

ICD-9 Code Range: 518.5, 518.82

Cardiac arrest with CPR: The sudden abrupt loss of cardiac function that results in loss of consciousness requiring the initiation of any component of basic and/or advanced cardiac life support. Excludes patients that arrive at the hospital in full arrest.

ICD-9 Code Range: 427.5 in conjunction with 99.60-99.69, 427.5 with 37.91; V12.53

Decubitus ulcer: Defined as any partial or full thickness loss of dermis resulting from pressure exerted by the patient's weight against a surface. Deeper tissues may or may not be involved. Equivalent to NPUAP Stages II – IV and NPUAP "unstageable" ulcers.

EXCLUDES intact skin with nonblanching redness (NPUAP Stage I), which is considered reversible tissue injury.

ICD-9 Code Range: 707.00 through 707.09 with one code from 707.22-707.25 to indicate the stage using the highest stage documented

Deep surgical site infection: Defined as a deep incisional SSI must meet one of the following criteria:

1. Infection occurs within 30 days after the operative procedure if no implant is left in place or within one year if implant is in place and the infection appears to be related to the operative procedure and involves deep soft tissues (e.g., fascial and muscle layers) of the incision

AND patient has at least one of the following:

1. purulent drainage from the deep incision but not from the organ/space component of the surgical site of the following:
2. a deep incision spontaneously dehisces or is deliberately opened by a surgeon and is culture-positive or not cultured when the patient has at least one of the following signs or symptoms: fever (>38℃), or localized pain or tenderness. A culture-negative finding does not meet this criterion.
3. an abscess or other evidence of infection involving the deep incision is found on direct examination, during reoperation, or by histopathologic or radiologic examination
4. diagnosis of a deep incisional SSI by a surgeon or attending physician.

NOTE: There are two specific types of deep incisional SSIs:

1. Deep Incisional Primary (DIP)- a deep incisional SSI that is identified in a primary incision in a patient that has had an operation with one or more incisions (e.g., C-section incision or chest incision for CBGB)

2. Deep Incisional Secondary (DIS)-a deep incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site [leg] incision for CBGB)

REPORTING INSTRUCTIONS:

• Classify infection that involves both superficial and deep incision sites as deep incisional SSI.

ICD9 Code Range: 674.30, 674.32, 674.34, 996.60-996.63; 996.66-996.69, 998.59

Drug or alcohol withdrawal syndrome: Defined as a set of symptoms that may occur when a person who has been habitually drinking too much alcohol or habitually using certain drugs (e.g. narcotics, benzodiazepine) experiences physical symptoms upon suddenly stopping consumption. Symptoms may include: activation syndrome (i.e., tremulousness, agitation, rapid heart beat and high blood pressure), seizures, hallucinations or delirium tremens.

ICD-9 Code Range: 291.0, 291.3, 291.81, 292.0

Deep Vein Thrombosis (DVT): The formation, development, or existence of a blood clot or thrombus within the vascular system, which may be coupled with inflammation. This diagnosis may be confirmed by a venogram, ultrasound, or CT. The patient must be treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava.

ICD-9 Code Range: 451.0, 451.11, 451.19, 451.2, 451.81- 451.84, 451.89, 451.9, 453.40, 459.10-459.19, 997.2, 999.2

Extremity compartment syndrome: Defined as a condition not present at admission in which there is documentation of tense muscular compartments of an extremity through clinical assessment or direct measurement of intracompartmental pressure) requiring fasciotomy. Compartment syndromes usually involve the leg but can also occur in the forearm, arm, thigh, and shoulder. Record as a complication if it is originally missed, leading to late recognition, a need for late intervention, and has threatened limb viability.

ICD-9 Code Range: 729.71, 729.72, 998.89, 958.91, 958.92, 958.90

Graft/prosthesis/flap failure: Mechanical failure of an extracardiac vascular graft or prosthesis including myocutaneous flaps and skin grafts requiring return to the operating room or a balloon angioplasty.

ICD-9 Code Range: 996.00, 996.1, 996.52, 996.55, 996.61, 996.62, 996.72

Myocardial infarction: A new acute myocardial infarction occurring during hospitalization (within 30 days of injury).

ICD-9 Code Range: 414.8, 412

Organ/space surgical site infection: Defined as an infection that occurs within 30 days after an operation and infection involves any part of the anatomy (e.g., organs or spaces) other than the incision, which was opened or manipulated during a procedure; and at least one of the following, including:

1. Purulent drainage from a drain that is placed through a stab wound or puncture into the organ/space;

2. Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space;

3. An abscess or other evidence of infection involving the organ/space that is found on direct examination, during reoperation, or by histopathologic or radiologic examination; or

4. Diagnosis of an organ/space SSI by a surgeon or attending physician.

ICD9 Code Range: 998.59

Pneumonia: Patients with evidence of pneumonia that develops during the hospitalization. Patients with pneumonia must meet at least one of the following two criteria:

Criterion 1. Rales or dullness to percussion on physical examination of chest AND any of the following:

a. New onset of purulent sputum or change in character of sputum

b. Organism isolated from blood culture

c. Isolation of pathogen from specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy

Criterion 2. Chest radiographic examination shows new or progressive infiltrate, consolidation, cavitation, or pleural effusion AND any of the following:

a. New onset of purulent sputum or change in character of sputum

b. Organism isolated from the blood

c. Isolation of pathogen from specimen obtained by transtracheal aspirate, bronchial brushing, or biopsy

d. Isolation of virus or detection of viral antigen in respiratory secretions

e. Diagnostic single antibody titer (IgM) or fourfold increase in paired serum samples (IgG) for pathogen

f. Histopathologic evidence of pneumonia

ICD-9 Code Range: 480.0-480.9, 481, 482.0-482.3, 482.30-483.39, 482.40-482.49, 482.81-48.89, 482.9, 483.0-483.8, 484.1-484.8, 485, 486, 997.31

Pulmonary embolism: Defined as a lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system. Consider the condition present if the patient has a V-Q scan interpreted as high probability of pulmonary embolism or a positive pulmonary arteriogram or positive CT angiogram.

ICD-9 Code Range 415.11; 415.12; 415.19; 416.2

Stroke/CVA: A focal or global neurological deficit of rapid onset and NOT present on admission. The patient must have at least one of the following symptoms:

1. Change in level of consciousness,
2. Hemiplegia,
3. Hemiparesis,
4. Numbness or sensory loss affecting one side of the body,
5. Dysphasia or aphasia,
6. Hemianopia
7. Amaurosis fugax,
8. Or other neurological signs or symptoms consistent with stroke

AND

- Duration of neurological deficit ≥24 h
- OR duration of deficit <24 h, if neuroimaging (MR, CT, or cerebral angiography) documents a new hemorrhage or infarct consistent with stroke, or therapeutic intervention(s) were performed for stroke, or the neurological deficit results in death

AND

- No other readily identifiable nonstroke cause, e.g., progression of existing traumatic brain injury, seizure, tumor, metabolic or pharmacologic etiologies, is identified

AND

- Diagnosis is confirmed by neurology or neurosurgical specialist or neuroimaging procedure (MR, CT, angiography) or lumbar puncture (CSF demonstrating intracranial hemorrhage that was not present on admission).

Although the neurologic deficit must not present on admission, risk factors predisposing to stroke (e.g., blunt cerebrovascular injury, dysrhythmia) may be present on admission.

ICD-9 Code Range: 434.01, 434.11, 434.91, 433.01-433.91, 997.02

Superficial surgical site infection: Defined as an infection that occurs within 30 days after an operation and infection involves only skin or subcutaneous tissue of the incision and at least one of the following:

1. Purulent drainage, with or without laboratory confirmation, from the superficial incision.
2. Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision.
3. At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat and superficial incision is deliberately opened by the surgeon, unless incision is culture-negative.
4. Diagnosis of superficial incisional surgical site infection by the surgeon or attending physician.

Do not report the following conditions as superficial surgical site infection:

1. Stitch abscess (minimal inflammation and discharge confined to the points of suture penetration).
2. Infected burn wound.
3. Incisional SSI that extends into the fascial and muscle layers (see deep surgical site infection).

ICD9 Code Range: 998.59

Unplanned intubation: Patient requires placement of an endotracheal tube and mechanical or assisted ventilation because of the onset of respiratory or cardiac failure manifested by severe respiratory

distress, hypoxia, hypercarbia, or respiratory acidosis. In patients who were intubated in the field or Emergency Department, or those intubated for surgery, unplanned intubation occurs if they require reintubation > 24 hours after extubation.

Urinary Tract Infection: Defined as an infection anywhere along the urinary tract with clinical evidence of infection, which includes at least one of the following symptoms with no other recognized cause:

1. Fever≥38 C
2. WBC> 100,000 or < 3000 per cubic millimeter
3. Urgency
4. Frequency
5. Dysuria
6. Suprapubic tenderness

AND positive urine culture (≥100,000 microorganisms per cm^3 of urine with no more than two species of microorganisms)

OR at least <u>two</u> of the following signs or symptoms with no other recognized cause:

1. Fever≥38 C
2. WBC> 100,000 or < 3000 per cubic millimeter
3. Urgency
4. Frequency
5. Dysuria
6. Suprapubic tenderness

AND at least <u>one</u> of the following:

1. Positive dipstick for leukocyte esterase and/or nitrate
2. Pyuria (urine specimen with >10 WBC/mm^3 or >3 WBC/high power field of unspun urine)
3. Organisms seen on Gram stain of unspun urine
4. At least two urine cultures with repeated isolation of the same uropathogen (gram-negative bacteria or S. saprophyticus) with ≥10^2 colonies/ml in nonvoided specimens
5. ≤10^5 colonies/ml of a single uropathogen (gram-negative bacteria or S. saprophyticus) in a patient being treated with an effective antimicrobial agent for a urinary tract infection
6. Physician diagnosis of a urinary tract infection
7. Physician institutes appropriate therapy for a urinary tract infection

Excludes asymptomatic bacteriuria and “other” UTIs that are more like deep space infections of the urinary tract.

ICD9 Code Range: 595.0-595.9 or 599.0

Catheter-Related Blood Stream Infection: Defined as organism cultured from the bloodstream that is not related to an infection at another site but is attributed to a central venous catheter. Patients must have evidence of infection including at least one of:

Criterion 1: Patient has a recognized pathogen cultured from one or more blood cultures and organism cultured from blood is not related to an infection at another site.

Criterion 2: Patient has at least one of the following signs or symptoms:

1. Fever>38 C
2. Chills
3. WBC> 100,000 or < 3000 per cubic millimeter
4. Hypotension (SBP<90) or >25% drop in systolic blood pressure
5. Signs and symptoms and positive laboratory results are not related to an infection at another site AND
6. Common skin contaminant (i.e., diphtheroids [Corynebacterium spp.], Bacillus [not B. anthracis] spp., Propionibacterium spp., coagulase-negative staphylococci [including S. epidermidis], viridans group streptococci, Aerococcus spp., Micrococcus spp.) is cultured from two or more blood cultures drawn on separate occasions.

Criterion 3:

1. Patient < 1 year of age has at least one of the following signs or symptoms:
    a. Fever (>38°C core)
    b. Hypothermia (<36°C core),
    c. Apnea, or bradycardia
    d. Signs and symptoms and positive laboratory results are not related to an infection at another site and common skin contaminant (i.e., diphtheroids [Corynebacterium spp.], Bacillus [not B. anthracis] spp., Propionibacterium spp., coagulase-negative staphylococci [including S. epidermidis], viridans group streptococci, Aerococcus spp., Micrococcus spp.) is cultured from two or more blood cultures drawn on separate occasions.

Erythema at the entry site of the central line or positive cultures on the tip of the line in the absence of positive blood cultures is not considered a CRBSI

ICD-9 Code Range: 993.1, 790.7, 038.0, 038.1, 038.10, 038.11, 038.19, 038.3, 038.4-038.43, 038.49, 038.8, 038.9,

Osteomyelitis: Defined as meeting at least one of the following criteria:

1. Organisms cultured from bone.
2. Evidence of osteomyelitis on direct examination of the bone during a surgical operation or histopathologic examination.
3. At least two of the following signs or symptoms with no other recognized cause: fever (38° C), localized swelling, tenderness, heat, or drainage at suspected site of bone infection and at least one of the following:
    a. Organisms cultured from blood
    b. Positive blood antigen test (e.g., H. influenzae, S. pneumoniae)
    c. Radiographic evidence of infection, e.g., abnormal findings on x-ray, CT scan, magnetic resonance imaging (MRI), radiolabel scan (gallium, technetium, etc.).

ICD-9 Code Range: 730.00-730.29

Unplanned return to the OR: Unplanned return to the operating room after initial operation management for a similar or related previous procedure.

Unplanned return to the ICU: Unplanned return to the intensive care unit after initial ICU discharge. Does not apply if ICU care is required for postoperative care of a planned surgical procedure.

Severe sepsis: Sepsis and/or Severe Sepsis: Defined as an obvious source of infection with bacteremia and two or more of the following:

1. Temp > 38 degrees C or < 36 degrees C

2. White Blood Cell count > 12,000/mm^3, or >20% immature (Source of Infection)

3. Hypotension – (Severe Sepsis)

4. Evidence of hypoperfusion: (Severe Sepsis)

    A. Anion gap or lactic acidosis or

    B. Oliguria, or

    C. Altered mental status

ICD-9 Code Range: 785.52, 995.92

Other Terms

Foreign Visitor is defined as any person visiting a country other than his/her usual place of residence for any reason.

Intermediate care facility: A facility providing a level of medical care that is less than the degree of care and treatment that a hospital or skilled nursing facility is designed to provide but greater than the level of room and board.

Home Health Service: A certified service approved to provide care received at home as part-time skilled nursing care, speech therapy, physical or occupational therapy or part-time services of home health aides.

Homeless: is defined as a person who lacks housing. The definition also includes a person living in transitional housing or a supervised public or private facility providing temporary living quarters.

Hospice: An organization which is primarily designed to provide pain relief, symptom management and supportive services for the terminally ill and their families.

Migrant Worker is defined as a person who temporarily leaves his/her principal place of residence within a country in order to accept seasonal employment in the same or different country.

Operative and/or essential procedures is defined as procedures performed in the Operating Room, Emergency Department, or Intensive Care Unit that were essential to the diagnoses, stabilization, or treatment of the patient's specific injuries. Repeated diagnostic procedures (e.g., repeated CT scan) should not be recorded (record only the first procedure).

Skilled Nursing Care: Daily nursing and rehabilitative care that is performed only by or under the supervision of skilled professional or technical personnel. Skilled care includes administering medication, medical diagnosis and minor surgery.

Undocumented Citizen is defined as a national of another country who has entered or stayed in another country without permission.

Appendix 4: NTDS References

National Trauma Data Standard (NTDS) Data Dictionary

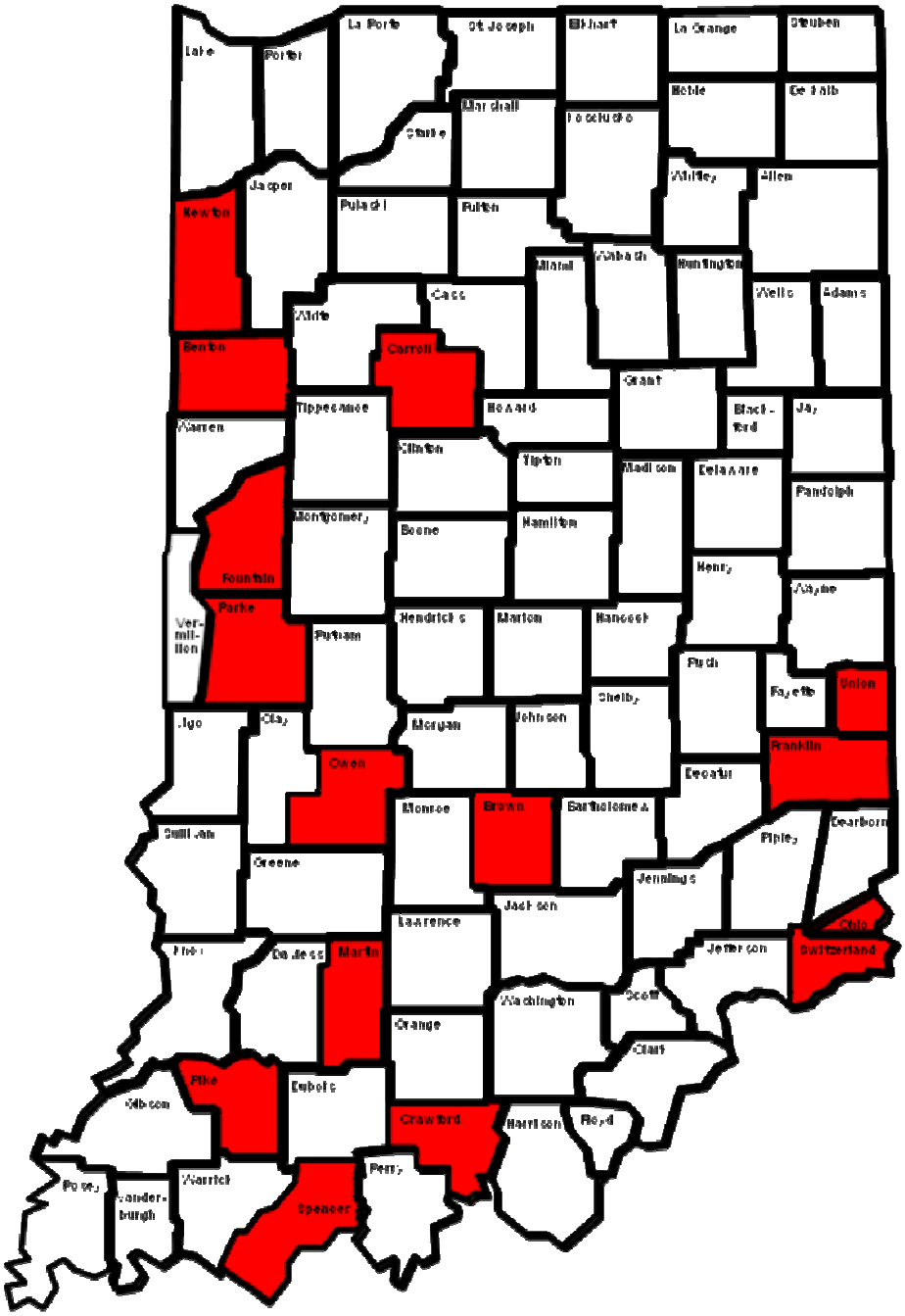
Content for the NTDS can be found at: http://www.ntdsdictionary.org/.

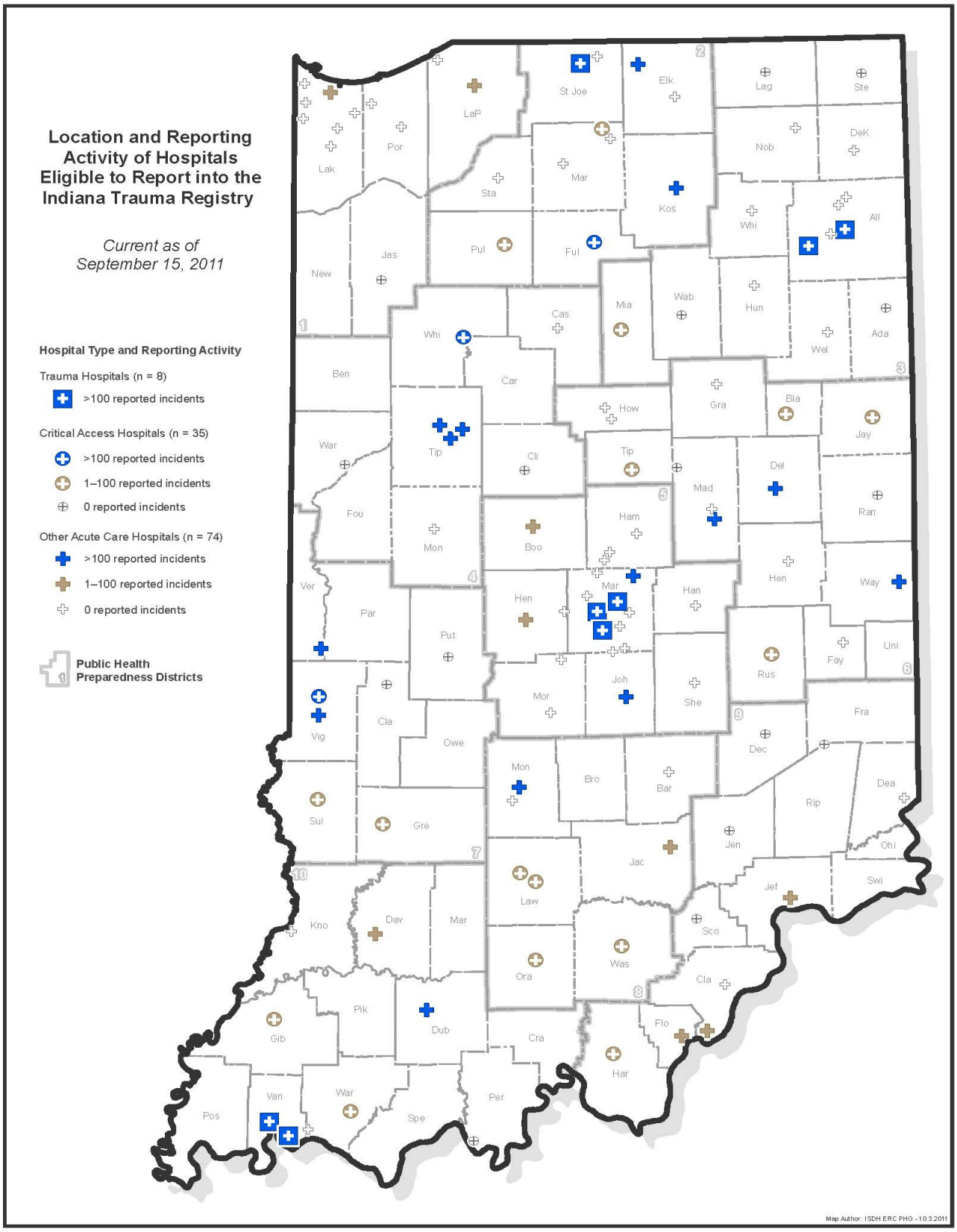
The following information should be reviewed before submitting data to the NTDB or Indiana Trauma Registry:

1. Appendix 1: NTDB Facility Dataset (pages 117-119 of the 2012 NTDS Data Dictionary)
2. Appendix 2: Edit Checks for the National Trauma Data Standard Data Elements (pages 120-138 of the 2012 NTDS Data Dictionary)
3. Appendix 3: National Trauma Data Standard Data Schema (pages 139-144 of the 2012 NTDS Data Dictionary)

Appendix 4: Maps

Counties without Hospitals




Location and Reporting Activity of Hospitals Eligible to Report into the Indiana Trauma Registry
Current as of September 15, 2011
Hospital Type and Reporting Activity
Trauma Hospitals (n = 8)
>100 reported incidents
Critical Access Hospitals (n = 35)
>100 reported incidents
1–100 reported incidents
0 reported incidents
Other Acute Care Hospitals (n = 74)
>100 reported incidents
1–100 reported incidents
0 reported incidents
Public Health Preparedness Districts
St Joe
Elk
Lag
Ste
LaP
Por
Lak
Sta
Mar
Kos
Nob
DeK
Whi
All
New
Jas
Pul
Ful
Mia
Wab
Hun
Wel
Ada
Cas
Whi
Ben
Car
How
Gra
Bla
Jay
War
Tip
Cli
Tip
Mad
Del
Ran
Fou
Mon
Boo
Ham
Ver
Par
Put
Hen
Mar
Han
Hen
Way
Fay
Uni
Rus
Vig
Cla
Owe
Joh
She
Mor
Fra
Dec
Mon
Bro
Bar
Dea
Rip
Sul
Gre
Jen
Ohi
Jac
Swi
Jef
Law
Kno
Dav
Mar
Sco
Was
Ora
Cla
Pik
Dub
Flo
Gib
Cra
Har
Van
War
Per
Pos
Spe
Map Author: ISDH ERC PHG - 10.3.2011